Course Title: AET-108 Wind Energy Installation

Course Instructor(s): Anthony Valente

Programs: Alternative Energy Technology

Expected Learning Outcomes

- 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.

Assessment

Assessments will include:
2 written tests and a final written exam
Classroom lab exercises and assignments

Validation

1. Comparison of final exam results with national average skills in the wind energy field of work.

2. The evaluation of student performance and ability to transfer knowledge to next level of class in the program.

3. Consult Advisory Committee participants as to performance of interns and hired students based on ability and knowledge gained.

Results

The results of the testing and final examination will show the level of retention of the classroom materials.

The results of the practice exercises and assignments will show the ability of the student to transfer textbook information to hands-on applications.

The results of the Advisory Committee input will allow us to place a rate of success in our database for ongoing improvement to the course and advise us of changes in technology and industry standards.

Internships will measure the student outcomes in a real world environment through feedback from internship supervisor.

Final grades for Fall 2013 indicate a class average of 89%. Students were successful at performing hands on classroom assignments.

Follow-up

The data will be evaluated to improve teaching techniques
The data will be evaluated to help us remain up to date with technology changes.

Develop additional hands on activities to include control panel wiring and organization.

Budget Justification

Update textbook to include changes in technology
Update classroom equipment to keep pace with changes in technology

Teaching supply budget is sufficient to handle the changes.