

**Course Title:** AET-106 Photovoltaic Installation

**Date:** Fall 2017

**Course Team:** Greg Betz

### **Expected Learning Outcomes**

- Specify and install a typical photovoltaic system
- Collect and evaluate data from a solar voltaic system
- Start up a photovoltaic system
- Maintain and troubleshoot a photovoltaic system
- AET-106 Photovoltaic Installation
- Calculate proper wire size

### **Assessment**

- Total of 3 tests throughout the semester
- Classroom lab exercises and assignments

### **Validation**

- Comparison of students grades with previous semesters
- Consult internship supervisors and companies about performance of interns and hired students based on ability and knowledge gained.
- The evaluation of student performance and ability to transfer knowledge to next level of class in the program.

### **Results**

- **Fall 2017**
  - Class average 85%. Previous semester 78% (only 2 students)
  - Students were successful at performing hand on classroom assignments
- The results of the testing and final examination show retention of the classroom materials.
- The results of the practice exercises show the ability of the student to transfer textbook information to hands-on applications.
- Internships will measure the student outcomes in a real world environment through feedback from internship supervisor

### **Follow-up**

- The data will be evaluated to improve teaching techniques
- The results will be used to alter the course content to focus on areas were students had the most issues
- The data will be evaluated to help us remain up to date with technology changes.

### **Budget Justification**

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