### Course Outcomes AET-104 Geothermal Installation

**Course Title:** AET-104 Geothermal Installation

Date: Fall 2017

Course Team: Tadd Forrest

# **Expected Learning Outcomes**

- Perform Geo-thermal mechanical installation as part of a work crew
- Follow safe work practices
- Identify problems and take corrective action
- Install and repair piping systems
- Identify routine and preventive maintenance requirements and perform such task
- Collect and evaluate operational data
- Calculate basic electrical and thermal load

#### **Assessment**

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

#### Validation

- Comparison of final exam results with national average skills in the geothermal field of work.
- The evaluation of student performance and ability to transfer knowledge to next level of class in the program.
- 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

## 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.

## **Budget Justification**

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