

Course Outcomes AET-102 Intro to Alternative Energy Technology

Course Title: AET-102 Introduction to Alternative Energy Technology

Course Instructor(s): Anthony Valente

Programs: Alternative Energy Technology

Expected Learning Outcomes

- Identify and differentiate alternative energy systems.
- Conduct and evaluate data collection from alternative energy systems.
- Identify applications for use of alternative and renewable energy.
- Document research regarding future career opportunities in the energy field.
- Understand 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 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.

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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 Spring 2016 indicate a class average of 81%. Students were successful at performing hands on classroom assignments. Students who completed this course in previous semesters and qualified for an Internship continue receiving excellent evaluations by their internship and employment sites. The students would perform better in the BPI building analyst section of the class if all of the hardware could be mounted as it would be in a real building. Suggestions will be made below.

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.

As a result of the delay in building the energy efficiency and multipurpose training building, I will recommend that we take the automatic door closer off of the door to the storage room in S TEM 208 so that the blower door testing hardware can be set up for classes. Although it is not an ideal test situation it does give a place to mount the hardware and show the students how to operate the equipment using industry.

Budget Justification

Update textbook to include changes in technology

Update classroom equipment to keep pace with changes in technology

Updated blower test equipment has been requested in your planning which includes a smart phone application for calculations.