

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 Fall 2015 indicate a class average of 85%. 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 new hydrogen fuel-cell lab vehicles were incorporated into class this semester and provided enhanced training of fuel-cell technology. The students performed well during these exercises.

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.

No changes required at this time.

Budget Justification

Update textbook to include changes in technology

Update classroom equipment to keep pace with changes in technology

Students were provided an electronic copy via movable of the lab manual used for the in class exercises. This allows students to read and prepare for in class exercises in advance.