Course Title: INT-105 Plumbing and Pipefitting

Course Instructor(s): Richard Calhoun

Programs: Industrial Technology, Alternative Energy Technology

Expected Learning Outcomes

1. Identify basic tools and materials of the plumbing trade.
2. Develop safe and effective application skills from cognitive learning.
3. Demonstrate effective fabrication of materials in the plumbing profession.
4. Demonstrate effective installation of common plumbing fixtures.
5. Describe the key plumbing trade terms and definitions.
6. Assess basic plumbing trouble shooting skills.

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 plumbing, energy, commercial and industrial 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.

The average classroom grade for the fall 2015 semester was 88%. Although the percentage is high, it is not uncommon for an introductory plumbing class. However it is noted that more attention was needed in the area of measurement tools.

Student application exercises which included more use of measurement equipment was increased during the semester.

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.

Students will be evaluated in courses that this course is a prerequisite for to determine whether or not the use of measurement tools is been accomplished at a satisfactory level.

Budget Justification

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

No Budget or Textbook upgrades required at this time.