

Course Outcomes INT 111 Pumps and Motors

Course Title: INT 111 Pumps and Motors

Course Instructor(s): Anthony Valente

Programs: Industrial Technology, Alternative Energy Technology,

Expected Learning Outcomes

- List the most common pump types used in industry.
- Describe the effects of mechanical load on a motor.
- Identify typical components of a pump system.
- Explain what considerations are required to determine pump selection.
- Explain typical piping layouts and pump location within a system.
- Describe operating characteristics of various pump designs.
- Describe the relationships flow and pressure.
- Describe routine maintenance requirements for a typical pump system.
- Identify causes of pump failures.
- Perform inspections and repairs on a pump system.

Assessment

Assessments will include:
2 written test and a final exam.
Classroom lab exercises and assignments.
A final assignment in circuit design.

Validation

1. Comparison of final exam results with national average skills in the electrical 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 lab 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.

During the spring semester of 2014 it was noted that the students average grade was 80%.

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.

Student evaluation showed a consensus for more hands-on activities.

Budget Justification

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

*We are in the process of looking at new textbooks that will enhance hands-on activities.
We are currently evaluating options to purchase more hands-on equipment for our FY15/126 budget year.*