

Syllabus 2011-2012

POWER EQUIPMENT TECHNOLOGY TRUMBULL CAREER & TECHNICAL CENTER

Mr. Howard Fraley, Instructor
(330) 847-0503 ext. 1309

Trumbull Career & Technical Center
Lab# E-103

Major Course Assignments and Projects

1. Technical Performance Projects: Throughout the course, the students will be graded on their ability to inspect, diagnose, service or repair in the following major system areas:

- 2 Cycle and 4 Cycle engine repair, trouble shooting and reconditioning.
- Basic transmissions and clutches.
- Electrical troubleshooting and repair
- Tool identification and usage.
- Fastener identification and usage.
- Customer service and relations
- Safety Practices
- Welding: MIG, Stick, Brazing.
- Cutting: Torch and plasma cutter usage.
- Tool crib management

2. Related Academic Projects:

- Research and create a basic service operation pricelist based on the type used by the power equipment industry
- Research and develop service department operating procedures
- Calculate part cost of repairs
- Calculate labor cost of repairs
- Estimate and calculate parts and labor for customer review
- Outline career opportunities within the power equipment industry
- Research and calculate costs related to power equipment repair
- S/P2® Safety and Pollution Certification
- Design, build and diagram an electrical circuit
- Design, build and use a troubleshooting flow chart

3. Related Projects:

- Supervise staff
- Assign work stations
- Monitor work station operations
- Train staff
- Communicate a sense of urgency in respect to accommodating customer needs
- Perform work evaluations
- Complete cleaning checklists
- Report theft and pilferage
- Schedule customer work

Evaluation Criteria

- Daily lab performance grades
- Hands on performance tests.
- Written assignments
- Quizzes/Tests

Pupil Performance Evaluation

A number of evaluation tools and strategies are used throughout a technical program during a typical grading period and ultimately a school year. The course sequence identifies many of these tools and strategies in correlation with the respective skills and knowledge. Quizzes, tests, exams, reports, assignments, performance assessments, rubrics, projects, employability characteristics are only a few of the tools and strategies that need to be condensed into a final grade for grading periods, semesters, year-end and program completions. The ultimate goal is to devise a final pupil evaluation policy or strategy that accurately reflects the thousands of behaviors, performances and accomplishments a student demonstrates during a typical program.

The Career Field Technical Content Standards provide a specific starting and ending point for evaluation. Each competency was developed by individuals with professional expertise who were instructed to identify “what an individual needs to know and/or what an individual needs to be able to do to be successful in the respective career field”. These competencies therefore represent the end point that will be the central focus of the pupil evaluation policy.

Secondary and post-secondary educators leveled the predetermined competencies in terms of where they would be taught and to what level of proficiency (introduced, proficient or reinforced). The pupil evaluation policy, therefore, is devised in such a way that it is an accurate reflection of this proficiency level. Parents, employers, and other educators will be able to interpret pupil’s knowledge and skill level from the evaluation policy.

Safety Testing: Skill and technical training is second only to the safety of our students. To that end, the Power Equipment Technology Program not only places a heavy emphasis on safety training, but requires that each student in the program take and pass safety tests before they begin any work that may have specific safety issues. The Power Equipment Technology Program gives three such tests during the course of the program.

- **General Lab Safety:** The Power Equipment Technology Program has a safety test that is intended to introduce the new student to safety issues associated with this program. There will be general classroom instruction to cover these issues and a written test to assess the student’s understanding of these issues and how to deal with them. This general lab safety test must be passed at 100% before the student will be allowed to begin working in the lab. A note will be sent home to the parent(s) indicating that the student has passed the test and will require a signature from them. This will be returned to the program and kept on file.
- **Machine/Equipment Specific Safety:** Students will begin using different types of machines and equipment at various times throughout the program. Prior to using each machine or piece of equipment for the first time, he/she will be instructed in its safe and proper use. A test may be required to assess student understanding. These tests must be passed with 100% accuracy.

- **Safety and Pollution Prevention (SP/2) General Industry Safety and Todaysclass.com Safety Module:** These tests are an on-line course that instructs each student in the safety issues associated with their industry. This program is to be completed in the first two weeks of class, requires 6-8 hours each of online interaction and may or may not be completed during regular class time. Passage benchmarks for these tests are set by SP/2. Students who successfully complete this safety course will receive the industry recognized certificate from this agency.

General Safety Policies:

1. Students will be given safety instruction throughout the program. Students must pass any safety tests associated with this instruction before beginning any actual work in the specific area.
2. Parents of students, who fail the general lab safety, the SP/2 safety test or any specific safety test five consecutive times, will be required to attend a conference to discuss that student's requirements for continued participation in the program. This conference will be with the program teacher, program supervisor as well as the student.

Senior Job Shadow

In addition all senior students must participate in the yearly "Job Shadow" Day in accordance to the school policy. This is a mandatory assignment school wide. Students must secure a related job site to visit and complete all necessary paper work. This assignment will be worth a total of 200 points. The date for the job shadow will be announced at least 30 days in advance. There will also be one alternate date given for the Job Shadow. Students that DO NOT complete their Job Shadow on one of the given dates will receive no credit for this assignment.

Grading Scale

The lab grade will be based on lab performance tests, written assignments, online courses, quizzes/tests and daily lab performance, a 25 point system will be used daily for their lab performance grade. The daily lab points are as follows:

Lab Safety: 5 points
Participation: 5 points
Skill: 5 points
Equipment: 5 points
Clean up 5 points

The grading scale is as follows:

A- 92-100%
B- 83-91%
C- 74-82%
D- 66-73%
F- 0- 65%

Please note that any time out of lab, including time spent in the Alternative Learning Center (ALC), will result in loss of points and possibly affect certification requirements.