

NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

WEL 116 - WELDING I (OXYACETYLENE) (2 CR.)

COURSE DESCRIPTION

Teaches oxygen/acetylene welding and cutting including safety of equipment, welding, brazing, soldering and cutting procedures. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

GENERAL COURSE PURPOSE

WEL 116 is a one semester course designed to provide the student with a basic knowledge of oxyacetylene welding, safety, set-up, and practical application of the process. The student will develop an understanding of equipment, procedure, and technique as applied to industry and personal use. This course will introduce the beginner welder to the welding field and serve as a refresher course for experienced welders.

COURSE OBJECTIVES

Upon completion of this course the student will be able to:

- A. demonstrate proficient knowledge of safety and set-up of equipment
- B. demonstrate proficient knowledge of fusion welding and torch burning
- C. demonstrate proficient knowledge of torch brazing, braze welding, and silver brazing
- D. demonstrate proficient knowledge of quench and tempering tool steel

MAJOR TOPICS TO BE INCLUDED

- A. Careers in Welding, general shop safety, oxyacetylene safety and set-up
- B. Oxyacetylene and gas welding equipment, set-up and techniques
- C. Oxyacetylene cutting and flame cutting techniques
- D. Brazing and soldering of ferrous and non-ferrous materials
- E. Oxyacetylene metallurgy
- F. Oxyacetylene welding vocabulary

EXTRA TOPICS (optional)

Gas welding aluminum