NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

WEL 141 - WELDER QUALIFICATION TEST I (3 CR.)

COURSE DESCRIPTION

Studies techniques and practices of testing welded joints through destructive and non-destructive tests, organizations, codes and specifications governing weld testing. Lecturer 2 hours. Laboratory 3 hours. Total 5 hours per week.

GENERAL COURSE PURPOSE

WEL 141 is designed to advance the student to an occupational proficiency in weld testing. The advanced welding student will find Welder Qualification Test I valuable in understanding the tolerances and specifications required of professional welders. Experienced quality control personnel will find WEL 141 educational as a refresher course.

COURSE OBJECTIVES

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

A. demonstrate a proficient knowledge of welding techniques and purpose of operation qualification test
B. become proficient in the techniques and practices of inspection
C. demonstrate a proficient skill in the site preparation and set-up of test specimens for welding in all positions
D. obtain proficient knowledge in the welding and interpretation of welding tests
E. demonstrate his knowledge of safety in the welding lab at all times

MAJOR TOPICS TO BE INCLUDED

A. Strength of materials
B. Design of weldments, joint design, weld location, weld size and classification of welds
C. A.W.S. Structural Welding Code interpretation
D. Major methods of destructive and non-destructive testing
E. Welding symbols

EXTRA TOPICS (optional)

Qualification testing for certification in accordance with A.W.S. Structural Welding Code