

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