NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

WEL 146 - WELDING QUALITY CONTROL (3 CR.)

COURSE DESCRIPTION

Teaches techniques and practices of inspection, and interpretation of tests and measurements. Includes radiographic tests of joints of unlimited thickness welded in 3G and 4G positions. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

GENERAL COURSE PURPOSE

WEL 146 is a basic course in welding inspection, where the student will learn the techniques and practices of inspection. The student will develop an understanding in selection, preparation, and procedures that assure quality in welding. Experienced quality control personnel will find WEL 146 educational as a refresher course.

COURSE OBJECTIVES

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

A. become proficient in the techniques and practices of inspection
B. have a proficient knowledge in the preparation and measurements of A.W.S. pre-qualified welding joints
C. have a proficient knowledge in the welding and interpretation of welding tests performed on A.W.S. prequalified joints
D. demonstrate their knowledge of safety and set-up in the lab at all times

MAJOR TOPICS TO BE INCLUDED

A. Requirements and duties
B. Welding symbols
C. Welding procedure and Qualification procedure
D. Qualification of welders and welding operators
E. Heat control and weldment defects
F. Destructive and non-destructive testing

EXTRA TOPICS (optional)

Qualification testing for certification in accordance with A.W.S. structural welding code.