



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Introduction to Welding Engineering

WELDENG 2001

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Study of the principles of welding engineering, including processes, design, weldability of materials, codes and standards, and quality assurance.

Prerequisites and Co-requisites:

Prereq: MatScEng 2010, Physics 1251, and WeldEng-BS student; or permission of instructor.

Course Goals / Objectives:

- Ability to describe basic welding engineering terminology
- Understanding of major welding processes and their principles of operation
- Understanding of basic weld design concepts, welding symbols, and testing of weldments
- Ability to explain the effect of various welding processes on the properties of materials
- Understanding of basic weld metallurgy and welding defects and discontinuities
- Understanding of the basic weld inspection techniques and the use of codes and standards for assuring weld quality
- Understanding of cutting processes
- Introduction to the welding of plastics.

Course Topics:

Designation:

Required