

THREE RIVERS COMMUNITY-TECHNICAL COLLEGE  
COURSE OUTLINE

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Course Number/Title: MEC K286 Welding Engineering Applications

Lecture 3 hrs    Laboratory 0 hrs    Credit 3 hrs    Contact 3 hrs

Course Description: Learning basic welding techniques as applied to various welding materials

Method: Lecture

Text: Modern Welding Fed., Cary; Prentice Hall

Prerequisites: MFG K102/103; MEC K262/263 Co-Requisites: MEC K287

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COURSE TOPICS/CONTENT

HOURS

1. Arc Welding with Nonconsumable and Consumable Electrodes	13
2. Filler Metals Used for Welding	3
3. Gasses Used in Welding	3
4. Welding the Steels	6
5. Welding the Nonferrous Metals	5
6. Design for Welding	9
7. Welding Problems and Solutions	6
TOTAL HOURS	45

Date: February 12, 2008

Prepared By: Robert Lantz

Program Coordinator: Robert Lantz

Department Chairman: Timothy Wentzell

Continuation Sheet No 2 of 2

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Measurable Objectives

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Students will learn the basic terminology of welding processes and proper application of the various processes as regards to materials, quality and design of welds.

The students will be able to describe the various welding processes and to make a determination as to when these processes are to be utilized.

The student will be able to select the proper joint design for a particular application and specify the appropriate consumable materials.