

THREE RIVERS COMMUNITY-TECHNICAL COLLEGE
COURSE OUTLINE

Course Number/Title: MEC K263 Materials Science Lab

Lecture 0 hrs Laboratory 2 hrs Credit 1 hrs Contact 2 hrs

Course Description: Selected experiments to demonstrate the effects of processing, including heat treatment, on the properties of engineering materials. Standard materials tests are also performed

Method:

Text: Material Science & Metallurgy, Pollack

Prerequisites: MFG K102/103, TCN-K105 Co-Requisites: MEC-K262

COURSE TOPICS/CONTENT

	HOURS
1. Metallographic Examinations including etching, pictures and hardness testing in a document report	30

Total Hours: 30

Date: February 12, 2008

Prepared By: Patrick Knowles

Program Coordinator: Robert Lantz

Department Chairperson: Tony Benoit

Continuation Sheet No 2 of 2

Course Number/Title: MEC K263 Materials Science Lab

Measurable Objectives

Students will understand through experiments, the effects of work hardening, annealing, and quenching on metals.

Student will learn to perform standard materials tests, including:

Hardness tests

Tensile Tests

Impact Tests

Torsion Tests

Hardenability Test