

THREE RIVERS COMMUNITY-TECHNICAL COLLEGE
COURSE OUTLINE

Course Number/Title: MEC K282 Machine Design Lab

Lecture 0 hrs Laboratory 4 hrs Credit 2 hrs Contact 4 hrs

Course Description: Machine design projects involving senior design project

Method: Project Lab

Text: Machine Design, Wentzell

Prerequisites:MEC K250 Co-Requisites:MEC K281

COURSE TOPICS/CONTENT

	HOURS
These design projects will be designed to utilize many of the principles of machine elements such as springs, bolting, shaft design, and combined stresses, gearing, and bearings.	28
The lab will be utilized to design the student's senior project including the principles of machine design, fluid mechanics, thermodynamics, etc.	30
Presentation of final design project.	2

Date: February 12, 2008

Prepared By: Timothy Wentzell

Program Coordinator: Robert Lantz

Department Chairperson: Anthony Benoit

Continuation Sheet No 2 of 2

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Measurable Objectives

1. The student will experience the design process from conception through final drawings.
2. The student will perform structural and functional calculations to demonstrate acceptability of design.
3. The student will create assembly and details drawing suitable for construction and assembly.
4. The student will write a technical description of the project.