

COURSE TITLE AND NUMBER: TDT 131 CAD II

North Central Michigan College

NCMC MASTER COURSE SYLLABUS FOR YEARS 2001-2003

DIVISION/AREA: Business and Technology

DEPARTMENT: Business

DIVISION DIRECTOR: Robert J. Marsh, Ph.D., P.E.

ORIGINATOR: Robert Marsh

DEAN OF INSTRUCTION: Timothy Dykstra, Ph.D.

TOTAL HOURS OF INSTRUCTION: 4 LECTURE: 2 LAB: 2

TOTAL CONTACT HOURS: 70.4

COURSE NUMBER: TDT 131

CREDIT HOURS: 3

COURSE TITLE: CAD II

TRANSFERABLE

YES:

NO: X

TO:

PREREQUISITE(S)/COREQUISITE(S)/ADVISORY:

CATALOG DESCRIPTION:

A second course in the use of the AutoCAD software. You will build on the basic knowledge acquired in TDT 130 and expand them to develop three dimensional (3D) and more specialized drawings. This course may cover mechanical drawing, using Mechanical Desktop, or architectural drawing, using Architectural Desktop, both AutoCAD products. It is suggested that students confirm the nature of the course prior to enrolling by consulting the most current schedule. Advising Note: It is recommended that students have the abilities and knowledge of the topics covered in TDT 130 before enrolling in TDT131.

GENERAL EDUCATION OUTCOMES:

- Think critically and analytically
 - Select and use mathematical tools for problem solving and decision making
-

COURSE OBJECTIVES & OUTCOMES:

To gain basic CAD skills and learn about the following:

1. Operate the Mechanical Desktop Software (MCAD).
2. Operate the CAD workstation components (i.e. computer, input/pointing device, and output / hard copy device) using the MCAD software.
3. Explain the features, limitations, and considerations associated with the commands and Characteristics of "2D and 3D" AutoCAD.

COURSE TITLE AND NUMBER: TDT 131 CAD II

4. Produce accurately scaled drawings using the printer/plotter.

METHODS OF INSTRUCTION: Lecture and in class hands on AutoCAD assignments

METHODS OF EVALUATION:

GRADING BREAKDOWN

Homework	60%
Tests	25%
Attendance	15%
Total	100%

REQUIRED TEXTS:

MECHANICAL DESKTOP 4.0 FUNDAMENTALS

OPTIONAL SUPPLEMENTARY MATERIALS: AutoCAD and its Applications: Basics

Reasonable accommodations may be provided for students with documented physical, sensory, cognitive, systemic, and/or psychiatric disabilities. Please contact the Education Opportunity Program (EOP) at (231) 348-6687 to arrange services for this course.

TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

COURSE MATERIAL

Week	Chapter/Section	Description
1	-	Review of drawing skills acquired, course Overview, Layer Standards, Dimensioning Overview
2	23-24	Symbols and External References (XREF)
3	1,2,3	User Interface and Quick Start, Viewing the model
4	4	Sketching and Profiles
5	5	Constraints and Dimensions
6	6,7	Sketched Features
7	7,8	Work Features, Placed Features
8	Test #1	Midterm Exam
9	9	Editing the Model
10	10	Part Management- Local Parts
11	11	Part Management-External Parts
12	12	Assembly Constraints
13	13,14	Drawing Manager, Drawing Cleanup
14	16-17	Project
15	18	Project
16	Test #2	Final Exam

APPROVED FOR ADOPTION BY THE CRD/AP COMMITTEE ON 9/25/02