COLLEGE OF SAN MATEO
TECHNOLOGY DIVISION

COURSE OUTLINE

DEPT. & NUMBER: **DRAF 124**

COURSE TITLE: **COMPUTER-AIDED DRAFTING IV**

UNITS: 3.0

LECTURE HOURS/WEEK: 2 LAB HOURS/WEEK: 4

LENGTH OF COURSE: Semester Long

GRADING: Letter

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1. PREREQUISITE (Attached is Prerequisite Course Validation Form A):
   DRAF 122 or the equivalent with a grade of "C" or higher.

2. COREQUISITE: None

3. RECOMMENDED PREPARATION: None

4. CATALOG DESCRIPTION:
   124 Computer-Aided Drafting IV (3)
   Two lecture and four lab hours per week. Prerequisite: DRAF 122 or the equivalent. This advanced computer-aided drafting course covers the linkage of CAD data with third party software applications such as Microsoft Word, Excell and Access. The use of Autodesk's Mechanical Desktop, Auto-Architect, and Autovision will also be covered. (CSU)

5. CLASS SCHEDULE DESCRIPTION
   Computer-Aided Drafting IV
   This advanced CAD course covers links between AutoCAD data with third party software applications such as Microsoft's Word, Excel, and Access. Also included is an Introduction to Mechanical Desktop, Auto-Architect, and Autovision. Prerequisite: DRAF 122 or equivalent with a grade of C or better. (CSU).

6. COURSE OBJECTIVES
   Upon completion the student will be able to:
   a. move objects or text from one program to another,
   b. link data from a drawing to a database program,

c. create a mechanical drawing using Autodesk Mechanical Desktop,
d. create a basic floor plan using Auto-Architect,
e. create a rendered three-dimensional image of an AutoCAD drawing.

7. COURSE CONTENT AND SCOPE

These are the subjects areas covered:

a. Window Applications
   - Object linking and embedding
   - Editing
   - Updating
   - Working with OLE (Object Linking and Embedding) objects

b. External Databases
   - Query language
   - Organizing external data
   - Accessing external data
   - Modifying external data
   - Linking
   - Using SQL (Structured Query Language)
   - Creating reports

c. Autodesk Mechanical Desktop
   - Basic commands of the software application
   - Parametric design

d. Autodesk Auto-Architect
   - Basic functions of Autodesk Architect

e. Autodesk Autovision
   - Rending
   - Lighting
   - Surfaces
   - Materials
   - Sharing data

8. INSTRUCTIONAL METHODOLOGIES

The method of instruction is a lecture/discussion followed by demonstration. A lab activity is assigned with each unit discussed.

9. MULTIPLE METHODS OF EVALUATION

Course Grades:	Assigned Drawings	50%	A = 90% to 100%
	Quizzes and Tests	10%	B = 81% to 90%
	Term Report	10%	C = 71% to 80%
	Term Project	10%	D = 51% to 70%
	Text Assignments	10%	F = 0 to 50%
	Attendance	10%	

10. REPRESENTATIVE TEXT MATERIALS

Several texts may be used because of the different programs used.

11. REQUIRED OUT-OF-CLASS ASSIGNMENTS
Reading and assignments from the texts. Lab and workbook assignments.

12. WRITING ASSIGNMENTS/PROFICIENCY DEMONSTRATION:
Students are required to write a term report and a term project that will demonstrate their proficiency with each software application covered in the course.

Prepared by: Jim Cullen Date: 10-30-96

9/96