#33

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: INTRODUCTION TO CAD

Code No.: CAD 120-3

Program: ARCHITECTURAL

Semester: THREE

Date: SEPTEMBER 1990

Author: ALISON CLARKE

New: _____ Revision: X

APPROVED: _____ 90/09/07
Chairperson Date

CALENDAR DESCRIPTION

INTRODUCTION TO CAD	CAD 120-3
Course Name	Course Number

PHILOSOPHY/GOALS:

To understand the use of the computer to develop graphic presentations.

To explore "AUTOCAD" and other software packages available for graphic presentation in various disciplines.

To understand basic computer concepts as they apply to Engineering design and drafting.

To achieve a basic knowledge of "AUTOCAD" principles by a hands on approach on the microcomputer.

METHOD OF ASSESSMENT (ALL COURSES)

The following grades will be assigned:

A+- 90 - 100%	consistently outstanding
A - 76 - 89%	outstanding achievement
B - 70 - 75%	consistently above average achievement
C - 60 - 69%	satisfactory achievement
I - Incomplete	
R - Repeat	the student has failed to achieve the objectives of the course and must repeat the course

The "I" grade (Incomplete) designation indicates that the student has not completed the objectives required in specific course areas.

Semester work will be made up of tests and assignments. All tests and assignments must be completed when assigned. Late assignments or projects will not be tolerated.

Attendance is also mandatory in all classes.

40% -- Average Test Results
45% -- Assignments
15% -- Attendance & Participation

100%

Tests and assignments will be given on a regular basis throughout the semester. Final examinations are also mandatory for any student that does not maintain an "A" average in the course or who has not completed all assignments by their due date.

REFERENCE TEXTS:

AUTOCAD and Its Applications
by Terence M. Shumaker/David A. Madsen

CAD 120-3

PERIODS	TOPIC INFORMATION
3	UNIT #1 - Introduction to CAD a) terminology b) what is "Autocad"? c) what can it do? d) system specifications e) overview - history f) micro technology g) getting started h) operating systems
3	UNIT #2 - Basic Commands Utility Commands: a - help b - end c - Quit d - save e - end save f - limits g - units h - menu i - rename j - keyboard use k - command reference l - flip screen m - function keys n - status
3	UNIT #3 - Graphic Primitives: a) line b) Pline c) circle d) arc e) trace f) methods of pointing g) snap h) grid i) ortho j) coordinates k) tutorial #1

6 UNIT #4 - Editing Commands:
- a) edit
- b) erase
- c) break
- d) move and copy
- e) arrays
- f) mirror imaging
- g) copy
- h) change
- i) move
- j) fillet
- k) chamfer
- l) attedit
- m) divide
- n) explode
- o) measure
- p) offset
- q) Pedit
- r) Rotate
- s) select
- t) scale
- u) trim
- v) stretch

6 UNIT #5 - Introduction to DOS
- a) files
- b) directories
- c) disk organization
- d) sub directories
- e) path
- f) the set command
- g) disk formatting
- h) other basic DOS commands

3 UNIT #6 - Display
- a) Zoom
- b) pan
- c) redraw
- d) regen
- e) fill
- f) tutorial #2

3

UNIT #7 - Layers Colours & Linetypes
a) basic concepts and properties
b) creating new layers
c) set colour
d) set linetype
e) turning layers on and off
f) scanning the library
g) freeze and thaw
h) tutorial #3

3

UNIT #8 - Blocks
a) creating block symbols
b) inserting blocks
c) wblock
d) custom block libraries
e) listing blocks
f) nested blocks
g) tutorial #4

3

UNIT #9 - Dimensioning
a) types of
b) tolerance
c) limits
d) variables
e) dimensioning utility commands
f) distance
g) auto dimensioning
h) units
i) dimensioning text
j) tutorial #5

3

UNIT #10 - Special Features
a) attributes
b) editing attributes
c) tutorial #6

3

UNIT #11 - Plotting
a) plotting to printer
b) plotting to plotter
c) plot specifications
d) plot scale
e) plotter problems

3 UNIT #12 - New Revised Autocad Features
a) poly line
b) shell command
c) editing

3 UNIT #13 - 3-D Level
a) elevation
b) viewpoint
c) the Z axis
d) HIDE
e) 3D line command
f) 3D face command
g) tutorial #6

3 UNIT #14 - Customizing Autocad
a) creating screen menus
b) tutorial #7

3 UNIT #15 - Customizing Autocad
a) creating tablet menus
b) tutorial #8