

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: ELECT/ELECT DRAFTING

Code No.: ELR 112 Semester: TWO

Program: ELECTRICAL/ELECTRONICS

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Date: JAN. 1990 Previous Outline Dated: _____

APPROVED: *J.P. Crozitto* _____
Chairperson Date

ELECT/ELECT DRAFTING

ELR 112

Course Name

Course Number

Total Credit Hours 30

Prerequisite(s): _____

I. PHILOSOPHY/GOALS:

To develop the skills and knowledge of drafting techniques requisite to the construction of drawings acceptable in the Electrical/Electronic industry.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

- 1) Check trueness of T-square.
- 2) Place paper correctly on the drawing board.
- 3) Recall the proper grade of pencil to be used for different work.
- 4) Pencil techniques.
- 5) Letter a drawing correctly.
- 6) Construct border lines.
- 7) Construct lines to given dimensions using T-squares and set squares.
- 8) Construct a title block.
- 9) Demonstrate the ability to use the bow compass correctly.
- 10) Demonstrate the ability to visualize the three views in orthographic projection, given an isometric.
- 11) Demonstrate the ability to construct drawings to scale.
- 12) Demonstrate the ability to dimension a drawing correctly.
- 13) Demonstrate the ability to draw circles in a isometric drawing.
- 14) Demonstrate the ability to construct electro-geometric drawings.
- 15) Demonstrate the ability to identify graphic symbols for the home and industry.

CODE BOOK -- Demonstrate the ability to read and interpret the Electrical Code for the following:

- 1) Calculation of service size for a house.
- 2) Different methods of grounding.
- 3) Demonstrate the ability to use a nomograph to find the correct length of ground rod required.
- 4) Demonstrate the ability to calculate the size of winch required for pulling cables into underground ducts.
- 5) Demonstrate the ability to calculate feeder size for a group of AC motors.
- 6) Code relating to hazardous locations.
- 7) Code relating to electric heating.