

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

COURSE OUTLINE

Course Title: DRAFTING
Code No.: DRF 115-3
Program: HEAVY EQUIPMENT
Semester: ONE
Date: JUNE, 1984
Author: G. MACLEAN

New: _____ Revision: X

APPROVED: _____
Chairperson Date

DRAFTING
Course Name

DRF 115-3
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PHILOSOPHY/GOALS:

1. Make the student aware of the standard methods used to describe mechanical details and assemblies on technical drawings.
2. Provide practice in the interpretation of technical drawings.
3. Provide practice in the making of freehand sketches to communicate technical ideas, based on the same standard methods used in technical drawings.

TEXTBOOK(S):

Interpreting Engineering Drawings
by Jensen & Hines (Metric Edition) (Delmar Publishers)

REFERENCE TEXTS:

Blueprint Reading for Industry
by W.C. Brown (Goodheart-Willcox Co.)

Technical Freehand Drawing and Sketching
by Knowlton, Beauchemin, Quinn (McGraw-Hill)

Machinery's Handbook

NUMBER	PERIODS	TOPIC DESCRIPTION
1	6	<u>Freehand Sketching</u> 1. Techniques - straight lines - proportion - arcs and circles - ellipses - approximation of angles - division of a line into a given number of parts - standard lines 2. Practice in sketching in familiar shapes
2	6	<u>Orthographic Projection</u> 1. Selection of appropriate views 2. Sketching of objects with square and inclined surfaces 3. Sketching of objects having arcs and circles
3	6	<u>Pictorial Sketching</u> 1. Sketching of objects with isometric lines, non-isometric lines, arcs and circles 2. Isometric views of assemblies 3. Oblique sketches
4	2	<u>Lettering</u> 1. Practice in Gothic lettering
5	2	<u>Dimensioning</u> 1. Rules 2. Practice
6	2	<u>Screw Threads</u> 1. Types of representation 2. Drawing call-up of inch and metric threads

<u>NUMBER</u>	<u>PERIODS</u>	<u>TOPIC DESCRIPTION</u>
7	2	<u>Tolerances</u> 1. Limits 2. Bilateral and unilateral tolerancing 3. Minimum and maximum clearance between mating parts
8	5	<u>Sections</u> 1. Cutting plane 2. Section lining 3. Types of sections 4. Assembly sections
9	2	<u>Auxiliary Views</u>
10	2	<u>Weld Symbols</u>
11	2	<u>Structural Steel Shapes</u>
12	2	<u>Shop Terms and Standard Abbreviations</u>
13	6	<u>Interpreting of Technical Drawings</u>