195

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	SKETCHING AND BLUEPRINT READING		
Code No.:	DRF 119-03		
Program:	Welding and Fabricating		
Semester:	One		
Date:	August 21, 1987		
Au .or:	G. Michaud		

XX New: _____ Revision: ____

APPROVED:

Murphy Chairperson

Sept 9/87 Date

Sketching	&	Blueprint	Reading	D
-----------	---	-----------	---------	---

Course Name

DRF 119-03

Course

Number

PHILOSOPHY/GOALS:

In this course the student will learn to read Blueprints as they apply to the welding trade, also to sketch items using both the Orthographic projection method and the pictorial method.

Welding symbols as used in the welding and fabricating trade are of great importance to the students who plan to enter the trade. In this course the student will learn to draw and interpret the majority of the symbols encountered in the practice of welding.

METHODS OF ASSESSMENT (GRADING METHOD):

 a) Sault College Policy/Procedure No. 1-G-6, Academic Section
 b) Cmputer marked tests - 70% minimum
 c) Overall grading - Practical - 40% Theory - 40%
 Attendance, safety, attitude - 20%

GRADING:

A+	=	95		100%
A	=	85	-	94%
В	=	75	-	84%
С	=	60	-	74%

TEXTBOOK(S):

Handbook of Steel Construction (Canadian Institute of Steel Construction)

Blueprint Reading for the Welding Trade (Derrell C. Lockhart)

Film - Orthographic Projection
 (McGraw Hill)

Blueprints of a Steel Shop Addition (Four prints)

OBJECTIVES:

The basic objective is to develop a student with the ability to read blueprints and do sketching and understand the principles involved as they apply to the welding trade.

SKETCHING AND BLUEPRINT READING

Approximate minimum hours of study.

THEORY

45 HOURS PER SEMESTER

A	l hour		-	the working drawing main types of blueprint format sketching multi-view drawings sketching pictorial drawings
В	l hour			types of sectional views auxiliary views
С	l hour		-	format of a working drawing material lists types of blueprints
D	l hour		-	dimensions and tolerances typical dimensions basic dimensioning system
Ε	2 hours		-	<pre>materials and threaded fasteners structural shapes and terms standards for structural materials</pre>
		WRITE TEST	MFD1T	
F	6 hours		_	welding symbols types of weld joints basic weld types weld dimensions
		WRITE TEST	MFD2T	
G	3 hours		-	welding procedures code standards and specification reading and interpreting a welding procedure

WRITE TEST MFD3T

SECTION	THEORY	TOPIC INFORMATION
Н	4 hours	 pipefitting symbols for welding drawings for piping systems dimensioning piping systems
		WRITE TEST MFD4T
I	4 hours	 reading welding blueprints procedures for reading blueprints interpreting shop blueprints
		WRITE TEST MDF5T
J	l hour	 reading concrete and reinforcing steel drawings
K	2 hours	- reading steel erection drawings
L	4 hours	 reading structural steel detail drawings calculating weights in bill of material
		WRITE TEST

TOTAL HOURS 30

ADDITIONAL EXERCISES

	DRAFTING	EXERCISES
Al	4 hours	- detail drawing of steel column - detail drawing of steel beam
		(Drafting Mark)
A2	2 hour	 detail drawing of channel iron door frame
		(Drafting Mark)
A3	2 hours	- draw template for 4 piece 90 deg. elbow
		(Drafting Mark)
A4	3 hours	- draw template for "Y" fitting
		(Drafting Mark)
A5	3 hours	 draw template for a rectangle to round transition piece
		(Drafting Mark)
A6	l hour	- draw template for a cone
		(Drafting Mark)

TOTAL HOURS 15