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

## **COURSE QUIUNE**

Course Title:	WELDING		
Code No.:	MET103-2		
Program:	MACHINE SH	IOP	
Semester:	W91		
Author:	Gunter Thorn		
DATE	1991 01 04	PREVIOUS OUTLINE DATED:	1989 05 23

APPROVED:

**t**) **"7** Dean, School of Technical Trades

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WELDING

Course Name

MET103-2

#### **Course Number**

#### PHILOSOPHY/GOALS:

Basic welding skills and knowledge of the operation of welding equipment are needed by the machinist.

This course will serve as an introduction to general welding practices in a machine shop.

### METHODS QE ASSESSMENT {fiRABINfi MEIHG&):

2 Theory Tests Practical Skill	-	30% 70%
TOTAL		100%

#### TEXTBOOKfS):

I.A.S. Instruction Aid Sheets (handed out) and notes taken by students. Students should be given the course outline summary for MET103-2.

#### OBJECTIVES:

The basic objective is to develop a student with safe work habits and sound skills in the use of O.A. welding and cutting equipment, stick electrode welding in the flat position, and in addition gain an appreciation of metallurgical principles involved in welding.

The passing grade is a "C".

## TOPIC NO. PERIODS TOPIC DESCRIPTION

REFERENCE

<b>la</b> >	THE 1/2	O/LAB	Orientation to program. Introduction to O.A. Welding.		I.A.S.#1
2a b c d	1/2		Assembling and handling of equip Construction of equipment. Repairs to accessories. Types of 0. A. flames and fuel mixtures.	ment. Notes	Notes Demo I.A.S.#2
e f g			Welding Terms, positions, joints. Filler metals and their selection. Weld faults.		I.A.S.#3 Notes I.A.S.#4
3			Fusion welding practices.		Notes/Demo
4			Non-fusion welding practices.		I.A.S.#5
5			Cutting practices. Notes /Demo		I.A.S.#6
	1/2		Written Test		
TOTAL HR	S. 2	10	6 WEEKS		
7a b	1/2		Introduction to SMAW. Types of welding machines and their adjustments. Electrical principles.	Demo	I.A.S.#7 I.A.S.#8
С			Repairs to accessories.		Demo Demo
			SMAW practices.		I.A.S.#9 Demo
9a b c			Selection of welding machines. Selection of filler metals. Weld faults, recognition, prevention.		I.A.S.#10 I.A.S.#11 I.A.S.#12
d			Repair welding practices.		I.A.S.#13 Demo
е			Welding symbols.		I.A.5.#14
10	1/2		Testing		
TOTAL HRS	;	16	9 WEEKS		