

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: _____ METALLURGY _____
Code No.: _____ MET 206-3 _____
Program: _____ MECHANICAL TECHNICIAN _____
Semester: _____ IV _____
Date: _____ JANUARY, 1985 _____
Author: _____ K. CHENG _____

Key:

Revision:

APPROVED.

Chairperson

Date

METALLURGY

MET 206

Course Name

Course Number:

COURSE DESCRIPTION

Familiarization with the basics of metallurgy. Specifically, a brief introduction to the methods of extraction and reduction, of ferrous ores, the refining procedures, shaping and forming the mechanical properties of metals, the testing of materials, heat treatment of steel and surface treatments.

TEXTBOOK(S):

"Metallurgy" by Johnson and Weeks (5th edition), American Technical Publishers.

COURSE TOPICS (BASED ON TEXTBOOK)

- 1) Producing Iron and Steel:
 - Chapter 01 - Early History
 - Chapter 02 - The Smelting Process
 - Chapter 03 - Refining Into Steel
- 2) Shaping and Forming of Metals
 - Chapter 04 - Hot Rolling
 - Hot Forging
 - Effects of Work
 - Metal Forming
- 3) Mechanical Properties of Metals
 - Chapter 07 - Destructive Test
 - Non-Destructive Test
- 4) Heat Treatment
 - Chapter 09 Normalizing and Annealing
 - Hardening
 - Tempering
- 5) Surface Treatment
 - Chapter 10 - Hardening
 - Coatings

EVALUATION

Two tests	- 40%
Lab reports	- 30%
Assignments	- 30%

GRADING

80 - 100%	- A
70 - 79%	- B
60 - 69%	- C
< 60% Repeat	- R
Incomplete	- I