

#204

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: ENGINEERING SCIENCE

CODE NO.: ELR 105

SEMESTER: TWO

PROGRAM: ELECTRICAL/ELECTRONICS

AUTHOR: BILL ARMSTRONG

DATE: JANUARY 1993

PREVIOUS OUTLINE DATED: AUGUST 1989

W Filipowich

APPROVED:

DEAN

L P Chazuth

93-02-22

DATE



ENGINEERING SCIENCE
COURSE NAME

ELR105
CODE NO.

TOTAL CREDIT HOURS:

PREREQUISITE(S): NONE

I. PHILOSOPHY/GOALS

To provide the student with some basic skills in the measurement of physical quantities commonly encountered in today's industrial processes. To provide the student with a brief study of the scientific fundamentals associated with these quantities and their measurement methods.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course, the student will be able to:

- describe various methods of temperature, flow, level and pressure measurement.
- explain the fundamental scientific concepts behind these measurement methods.
- perform many of the above methods in the laboratory.
- calculate solutions to assigned problems dealing with measurement fundamentals.

4. Review how heat is transferred and temperature scales:

Convection
Conduction
Radiation
Celsius
Fahrenheit
Rankine
Kelvin