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

COURSE OUTLINE

SURVEYING

Course Title'

SUR 236-3

Code No,:

GEOLOGICAL ENGINEERING TECHNICIAN

Program:

IV (1989 SUMMER)

Semester:

MAY, 19 89

Date:

JOHN K. THEIL

Author:

(2)

New: Revision:

APPROVED:

Chairperson

Date

SUR 236-3

Course Name

Course Number

PHILOSOPHY/GOALS:

To continue the area of study begun in SUR 120 and introduce the student to linear measurement, stadia principles, engineers transit, traverse computation and horizontal curve computation.

METHOD OF ASSESSMENT (GRADING METHOD)

Assignments 40% Interim Test 20% Final Examination 40%

GRADING

A+ 90-100% 80-89% B 70-79% 60-69%

A passing grade will be based on a composite grading of 60%. Students obtaining a composite grading of 55-59% may be allowed to complete a supplementary examination.

TEXTBOOK(S):

Surveying Notes, Sault College - Campus Bookstore

TOPIC NO. NO. OF HOURS

TOPIC DESCRIPTION

LINEAR MEASUREMENT

Terms and definitions, units of linear measurement, conversions, methods of measuring distances, steel tapes taping methods, notekeeping, reduction of field notes, errors and mistakes in taping, establishing a pacing standard, modern electronic distance meters.

TRAVERSE SURVEYING

Types of traverses, angular closures methods of traversing, stationing, mistakes and errors in traverse surveys latitudes and departures, standards of accuracy, coordinates of points in a survey.

TOPOGRAPHIC MAPPING

Freehand lettering, plotting traverse data with protractor and scale, plotting coordinates, plotting irregular boundaries, plotting topographic detail mapping from field notes.

STADIA SURVEYING

Definitions, theory of stadia surveying the applications and limitations of stadia surveying, notekeeping, reduction of stadia field notes, plotting stadia topography

FIELD EXERCISES

Transits and tape traverse survey, stadia survey.