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

## COURSE OUTLINE

Course Title:	SURVEYING			
Code No.	SUR 120-3			
Program:	WATER RESOURCES ENGINEERING TECHNOLOGY			
Semester:	TWO (1989 WINTER)			
Date:	NOVEMBER, 19 88			
Author:	JOHN K. THEIL			

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APPROVED:	Chairperson	NOV 10 1988	$\frac{H^{\prime}It}{0}$
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## CALENDAR DESCRIPTION

SURVEYING

SUR 120-3

#### COURSE NAME

#### COURSE NUMBER

#### PHILOSOPHY/GOALS:

To introduce the student to basic surveying principles. The topics covered will be measurements, levelling theory and practice, and angular measurements and direction.

## METHOD OF ASSESSMENT:

Assignments	40%
Interim Test	20%
Final Examination	40%

#### GRADING:

A+	=	90%	-	100%
А	=	80%	-	89%
В	=	70%	-	79%
С	=	60%	-	69%

A pass 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

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#### SUR 120-3

TOPIC NUMBER TOPIC INFORMATION

#### GENERAL

Introduction, definitions of surveying types, kinds and purposes of surveys, kinds of surveying measurements, accuracy and precision of measurements, errors and mistakes.

#### LEVELING

Introduction to leveling, methods of measuring differences in elevation, terms and definitions, theory of leveling form of field notes, leveling instruments and their use, leveling rods and related accessory equipment, sources of error and necessary precautions, field exercise.

#### APPLICATION OF LEVELING

Profiles and their uses, methods of obtaining field data, plotting profiles from field notes, field exercise, grade lines and grade computations, giving grade in field, contours and contour leveling, plotting contours from field notes.

### ANGULAR MEASUREMENT AND DIRECTION

Terms and definitions, units of angular measurement, angular computations, methods of making angular measurements, meridians, azimuths and bearings, angles formed by lines of known direction, azimuths and bearings from field angles, magnetic compass surveying.