# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	SURVEYING			
Code No.:	SUR 201			
Program:	CIVIL ENGINEERING TECHNICIAN			
Semester:	THREE			
Date:	SEPTEMBER, 1989 JUNE, 1983 Previously Dated:			
Author:	V. VENN			

New:

Revision:

APPROVED: Chairperson

L'Oragett Date

FAA^

#### SURVEYING

Course Name

SUR 201

# Course Number

#### TEXTBOOK(S);

#### SURVEYING, PRINCIPLES AND APPLICATIONS

### by B.F. Kavanagh and S.J.G. Bird

# CIVIL ENGINEERING TECHNICIAN MARKING SYSTEM - SURVEYING

#### CRITERIA EMPLOYED FOR ASSESSMENT PURPOSES

1. TOTAL ASSIGNMENT, PROJECT AND TEST ASSESSMENT - ENTIRE SEMESTER

Late submissions will not be accepted unless prior consultation with instructor discloses unusual difficulty

2. ATTENDANCE

-Attendance will be recorded at the beginning of each class -Late arrivals will be marked absent -Chronic late arrivals will be refused admittance A poor attendance record will work to the detriment of the student where a border line situation is encountered

# ASSIGNMENT, PROJECT, AND TEST ASSESSMENT

Individual assignments, projects and tests will be assessed on a basis of 100 marks, -minimum acceptable grade = 60

# BREAKDOWN

TOTAL SEMESTER	=	100	marks
Assignments	=	25	marks
Mid-semester Tests		35	marks
Final Semester Tests	=	40	marks

MARKING SYSTEM (Con't)

EXAMPLE

8 Assignments at 100 marks each = 800 possible marks Assume 640 marks attained Therefore  $640 \ge 25 = 20$ 

800

Mid-Semester test Assume a grade of 74 marks attained Therefore  $74 \ge 35 = 26$ 

100

Final Semester test Assume a grade of 82 attained Therefore  $82 \times 40 = 33$ 

100

Therefore 20+26+33 = 79 or a grade of B

INCOMPLETE GRADES

- 1. Repeat assignments or tests to carry a maximum possible grade of 60.
- 2. Mid-semester test may be repeated only once. Final semester test rewrites will be scheduled only during the prescribed make up period. Failure to attain a satisfactory grade therein will require repeating the course. Satisfactory completion, Semester 3 will be a prerequisite for entry, Semester 4.

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# SAULT STE. MARIE

#### CIVIL ENGINEERING TECHNICIANS

#### COURSE OF STUDY OUTLINE

SUR 201-4 (PREREQUISITE SUR 235)

TOPIC NO.

HOURS

TOPIC INFORMATION

#### REVIEW

Types of traverses; calculation of azimuths and bearings from field angles; deflection angles; exercises

# REVIEW

Latitudes, departures, double meridian distances, circuit closure, areas, exercises

#### TERM PROJECT

Involves computation of latitudes, departures double meridian distances; final plot and computation will be submitted for grading

Use of modern theodolites versus transits, direction theodolites, repeating theodolites, micrometer versus direct reading; instruments; field exercises using theodolites

Specialized survey equipment; electronic measuring devices; field exercise

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# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

#### SAULT STE. MARIE

#### CIVIL ENGINEERING TECHNICIANS

#### COURSE OF STUDY

TOPIC NO. HOURS

#### TOPIC INFORMATION

- 16 HIGHWAY CURVES Elements of curves; alignment; stationing; simple parts of curves. Method of locating curves on ground calculations and related problems
- 10 <u>VERTICAL CURVES</u> Review of grade lines and gradients; grade line intersections; vertical parabolic curves; computation of offsets from grade lines. Location and elevation of high/low parts of curves. Field procedures.
- 12 PRACTICAL FIELD PROBLEMS Trigonometric levelling; curve stake out; setting batter boards