

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

**Course Title:** SURVEYING  
**Code No.:** SUR120-3  
**Program:** FORESTRY TECHNICIAN  
**Semester:** THIRD  
**Date:** AUGUST 1986  
**Author:** SALVATORE LENCO

New: Revision: X

APPROVED!

Chairperson ^1

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CALENDAR DESCRIPTION

SUR 120-3

SURVEYING

SUR 120-3

Course Name

Course Number

TEXT; Surveying Notes - Sault College

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	20%
Short Quizzes	
(in class)	10%
Mid Semester Tests	30%
<b>Final</b> Semester	
Test	40%
	100%

A	80% - 100%
B	70% - 79%
C	60% - 69%
X-R	UNDER 60%

1) Minimum acceptable grade is 60%,

2) Your assignments will carry equal weight and you will be notified one week in advance prior to handouts. Their due date is one week from issuing\* and late submissions will be penalized in the following fashion:

- 1 day late - loss of 20% for that particular assignment
- 2 days late - loss of 10% for
- 3 days late - loss of 10% for

NO ASSIGNMENTS will be accepted on the 4th day.

3) The in-class short quizzes will be given as the study lesson lends itself applicable. Each quizz will carry an equal weight. If you miss on quizz you will not be penalized. However, all subsequent quizzes will be penalized accordingly.

Mid term test or tests, as well as the final test, will be announced in advance. If your grade in either of these tests is below 59% then it will be up to the instructor whether you receive an "X" (Incomplete) or an "R" (Repeat). The criteria employed for arriving at that decision is class attendance and participation. If an "X" is administered then in your re-write test the best obtainable mark will be a "C". NOTE that re-writes are permitted only once. The final semester test re-writes will be scheduled only during the prescribed make-up period.

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FORESTRY TECHNICIAN  
SEMESTER 3

SUR 120-3

TOPIC NO,

TOPIC INFORMATION

GENERAL

Introduction, definitions of surveying types, kinds, and purposes of surveys, kinds of surveying **measurments**, 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, source of error and necessary precaution field exercise.

APPLICATION OF LEVELING

Profiles and their uses, methods 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

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## FORESTRY LAW...6

TOPIC	PERIODS	DESCRIPTION
		The History of Law in Natural Resources - Origin of Canadian and Ontario Laws a) how laws are formulated b) Provincial and Federal responsibilities c) Levels of Courts
		Laws and Their Application - Statute Law vs. Common Law a) crimes and torts b) types of offences c) officers to enforce regulations and the powers d) general enforcement procedures and guidelines
		Statutes to Protect our Forests and Forest-1 - Objectives and key sections of: a) The Crown Timber Act, The Forestry Act, Trees Act, and the Woodlands Improvement Act. b) The Forest Fire Prevention Act c) The Forest Tree Pest Control Act d) The Public Lands Act
		Statutes that Protect our Environment and Wa - Objectives and Key Sections of: a) The Provincial Parks Act and The Wilder. Act b) The Environment Protection Act c) The Environmental Assessment Act d) The Water Resources Act e) The Navigable Waters Act f) The Public Lands Act g) The Drainage Act h) The Canada Waters Act i) The Lakes and Rivers Improvement Act j) The Pesticide Act
		Statutes that Protect our Fish and Game -Objectives and Key Sections of: a) The Game and Fish Act b) The Fisheries Act c) The Endangered Species Act d) The Dog Licensing and Livestock and Poul Protection Act e) The Criminal Code of Canada f) The Migratory Birds Convention Act

FORESTRY **LAW**...7

TOPIC	PERIODS	DESCRIPTION
		Statutes to Protect People Related to Forest Resources
		a) Occupational Health and Safety Act
		b) The Public Health Act
		c) The Criminal Code of Canada
		d) The Trespass to Property Act and the Occupier's Liability Act
		e) Hunter's Damage Compensation Act
		f) Worker's Compensation Act

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## FORESTRY LAW...8

NOTE: For all references, see the office consolidation of the individual acts.

### Other Suggested Readings:

Estrin, D., and J. Swaigen, 1978. Environment on Trial - A Handbook of Ontario Environment Law. Can. Envir. Law Research Foundation. Toronto 587 p.

Readers Digest Ltd., 1976. You and The Law. Publ. by Readers Digest the Canadian Auto. Assoc. Montreal. 912 p.

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