

CALENDAR DESCRIPTION

APPLIED PHOTOINTERPRETATION

FOR 350-4

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: APPLIED PHOTOINTERPRETATION

Code No.: FOR 350-4

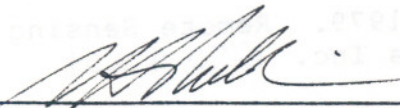
Program: FOREST MANAGEMENT TECHNOLOGY

Semester: V

Date: JANUARY, 1989

Author: ERWIN GOERTZ

New: _____ Revision: X

APPROVED:  Jan 9/89
 Chairperson Date

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COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS:

The student will acquire fundamental knowledge and skills in identifying forest tree species, delineating forest stands, identifying site types through glacial landform recognition and the application of aerial photos for data collection. Conventional aerial photography (OMNR standards), large-scale aerial photography (LSP), and satellite imagery will be involved. In addition, the student will master the transferring of information from aerial photographs to maps.

METHOD OF ASSESSMENT (GRADING METHOD):

Evaluation will be based on lab assignments as well as written tests after each unit covered. Lab assignments will make up 40% of the final grade, with tests comprising 60%. There will be three tests throughout the semester.

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

NOTE: There will be NO REWRITE at the end of the semester.

EQUIPMENT REQUIRED:

Pocket stereoscope
Black stabilo grease pencil

REFERENCES:

- o Pain, D.P. 1981. Aerial Photography And Image Interpretation For Resource Management. Forest Management Department, Oregon State University, Corvallis, Oregon.
- Lillesand, T.M., and R.W. Kiefer. 1979. Remote Sensing And Image Interpretation. John Wiley and Sons Inc. G70.4 .L54
- Avery, T.E. and G.L. Berlin. 1985. Interpretation Of Aerial Photographs, 4th edition. Burgess Publishing Co. TR 810 .A9 1977
- o Ontario Centre of Remote Sensing. 1982. An Introduction Manual On The Assessment Of Regeneration Success By Aerial Survey. Forest Resources Group. OMNR.

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TOPIC NO.	PERIODS	TOPIC DESCRIPTION
UNIT I		
1	1	- History of remote sensing
		- Importance of remote sensing to forestry
2	2	- Satellite imagery use in forestry
3	3	- Review of the geometry, scale, horizontal measurements, distances, azimuths and areas on photographs
4	1	- Principles and techniques of photo interpretation
	1	TEST
UNIT II		
5	2	- Tree species identification
		- Forest stand delineation
6	2	- Transferring information from aerial photos to maps
7	4	- Large-scale aerial photography (LSP) as applied to forest inventories
	1	TEST
UNIT III		
2	3	- LSP used in sampling (log booms) and plantation survival assessments
	2	- LSP used in volume estimates (chip piles and stacked wood)
9	2	- Identification of glacial landforms
10	2	- Forest damage identification
	1	TEST

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COURSE OBJECTIVES

- draw standard FRI and NTS map symbols, lines & lettering
- determine and use map scale, principles of ratio and proportion and similar triangles
- use and maintain drawing and lettering equipment
- identify and delineate features on aerial photos
- measure height, area, distances and directions on photos
- employ field verification methods
- transfer photo detail to maps
- measure area, distance and direction on a map
- order aerial photographs and maps
- determine and use procedures for identification of field location
- determine factors influencing route selection
- recognize and interpret geological features on aerial photos
- specify the relationship between timber type, landform and soil
- recognize sources of materials for road construction