SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: PHOTOGRAMMETRY

Code No.: FOR 104-4

Program: WATER RESOURCES

Semester: II

Date: JANUARY, 1987

Author: ERWIN GOERTZ

New: _____ Revision: ___X___

APPROVED: _____ Feb 24/87
Chairperson Date

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CALENDAR DESCRIPTION

PHOTOGRAMMETRY	FOR 104-4
COURSE NAME	COURSE NUMBER

PHILOSOPHY/GOALS:

The aim of this course is to provide the student with basic knowledge and skills in the principles and techniques of vertical air photo photogrammetry, interpretation and photography as applied to forestry applications.

METHOD OF ASSESSMENT:

Evaluation will be based on in-class lab assignments as well as written tests. To successfully complete the course, the student must have a passing grade in tests and assignments. Lab assignments will make up 40% of the final grade, with tests comprising the remaining 60%. Regular attendance is necessary in that any student missing a lab assignment or test without a legitimate reason will receive an "I" grade. Students receiving "I" grades on three assignments and/or tests will receive an "R" grade in the course.

Grades A - 80%
B - 70%
C - 60%

EQUIPMENT REQUIRED:

Pocket Stereoscope

TEXTBOOK(S):

Paine, D.P. 1981. Aerial Photography and Image Interpretation For Resource Management. Forest Management Department, Oregon State University, Corvallis, Oregon.

REFERENCES:

Sayn-Wittgenstein, L. 1978. Recognition of Tree Species On Aerial Photographs. Forest Management Institute. Canadian Forestry Service. Information Report FMR-X-118.

Zsilinszky, V.G. 1966. Photographic Interpretation of Tree Species in Ontario. Ontario Department of Lands & Forests.

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TOPIC NO.	PERIODS	TOPIC DESCRIPTION
		UNIT I
1	1	Course introduction, description, evaluation and grading Relevance of photogrammetric skills to water resources technologist History of aerial photography and applications
2	1.5	Use of stereoscopes, testing for stereo vision and depth perception (Chapter 3)
3	1.5	Geometry of a vertical aerial photograph (Chapter 2)
4	1	Scale of vertical aerial photographs (Chapter 4)
	1	**TEST**
		UNIT II
5	1	Horizontal measurements, distances, bearings and areas on aerial photos (Chapter 5)
6	1	Vertical measurements on aerial photos (Chapter 7)
	1	**TEST**

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TOPIC NO.	PERIODS	TOPIC DESCRIPTION
		UNIT III
7	2	Basic principles and techniques of aerial photointerpretation (Chapter 13)
8	1	Films, filters and the photographic process (Chapter 12)
9	1	Tree species identification (Chapter 17) Introduction to Forest Resource Inventory (FRI) forest stand maps
10	1	Forest stand delineation (Chapter 17)
11	1	Use of Sketchmaster to transfer photo detail to maps (Chapter 10)
	1	**TEST**

2967.01	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 feature on aerial photos. Measure height, area, distance and direction on an aerial photograph. Transfer photo detail to a map. Measure area, distance and direction on a map. Order aerial photographs and maps.
2968.01	Read maps and photos.