DOC. NO. 404

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: PHOTOGRAMMETRY

Code No.: FOR 104-4

Program: FORESTRY TECHNICIAN

Semester: ONE

Date: OCTOBER, 1987

Author: E. GOERTZ

New: _____ Revision: X

APPROVED: _____ Nov-27/87
Chairperson Date

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 sills in the principles and techniques of vertical air 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 cumulative passing grade in all tests and a cumulative passing grade in all 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 in that test or assignment. Students receiving "I" grades on three assignments and/or tests will receive an "R" grade in the course.

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

EQUIPMENT REQUIRED: Pocket Stereoscope, Black Stabilo grease pencil

TEXT:

Paine, D.P. 1981. Aerial photography and image interpretation for resource management. Forest Management Department, Oregon State University, Corvallis, Oregon.

REFERENCES: (Reserve shelf in Library)

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 and Forests.

PHOTOGRAMMETRY
FOR 104-4

TOPIC NO.	PERIODS	TOPIC DESCRIPTION
1	1	**UNIT I**
		- Course introduction, description, evaluation and grading - Relevance of photogrammetric skills to forest technicians - History of aerial photography and applications
2	2	- Use of stereoscopes, testing for stereo vision and depth perception (Chapter 3)
3	2	- Geometry of a vertical aerial photograph (Chapter 2)
4	3	- Scale of vertical aerial photos (Chapter 4)
5	2	- Horizontal measurements, distances, bearings and areas on aerial photos (Chapter 5)
	1	- Orienteering from aerial photos
	1	TEST
6	2	- Vertical measurements on aerial photos (Chapter 7)
		UNIT II
7	2	- Basic principles and techniques of aerial photo interpretation (Chapter 13)
8	4	- Tree species identification (Chapter 17)
9	2	- Forest stand delineation (Chapter 17)
10	3	- Use of Sketchmaster to transfer photo detail to maps (Chapter 10)
11	3	- Introduction to photogrammetry (35 mm camera)
	1	TEST

FOR 104-4

COURSE OBJECTIVES (COMPETENCY BASED)

BENCHMARK NO.	DESCRIPTION
2967.01	- Draw standard FRI and NTS map symbols, lines and lettering. - Determine and use map scale, principles of ratio and proportion and similar triangles. - Use and maintain drawing and lettering equipment. - Measure height, area, distance and direction on an aerial photo. - Transfer photo detail to a map. - Measure area, distance and direction on a map. - Order aerial photographs and maps.
2968.01	- Read maps and photographs.