

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, 1989

Author: ERWIN GOERTZ

New: \_\_\_\_\_ Revision: X

APPROVED:

  
Chairperson

Jan 9/89  
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 skills in the principles and techniques of vertical air photo photogrammetry, interpretation and photography as applied to water resources 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 both the tests and the assignments. Lab assignments will make up 25% of the final grade, with tests comprising the remaining 75%. There will be three (3) tests throughout the semester, each worth 25%. 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 tests and/or assignments will receive an "R" grade in the course.

NOTE:

There will be no rewrite at the end of the semester. The instructor is available during non-class time for extra help. Please do not pass up this opportunity if you find yourself needing it.

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

EQUIPMENT REQUIRED:

Pocket Stereoscope  
Black Stabilo grease pencil

REFERENCES:

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

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TOPIC NO.	PERIODS	DESCRIPTION OF TOPIC
UNIT I		
1	1	- Course introduction, description, evaluation and grading - Relevance of photogrammetric skills to water resources technologists - History of aerial photography and applications - Use of stereoscopes, testing for depth perception
2	1	- Geometry of a vertical aerial photograph
3	1	- Scale of a vertical aerial photograph
	0.5	TEST
UNIT II		
4	1	- Determining areas on aerial photos
5	1	- Horizontal measurements, distances, azimuths and bearings on aerial photos
	1	- Orienteering from aerial photos
6	1	- Vertical measurements on aerial photos
7	1	- Basic principles and techniques of aerial photo interpretation - Colour Infrared film and satellite imagery
8	1	- Glacial Landforms
	0.5	TEST

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TOPIC NO.	PERIODS	DESCRIPTION OF TOPIC
<b>UNIT III</b>		
9	0.5	- Tree species identification
10	1	- Watershed delineation
11	1	- Use of Sketchmaster to transfer photo detail to maps
12	1	- Introduction to photography and the 35 mm camera
	0.5	TEST

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COURSE OBJECTIVES

Students passing this course will be competent in the following areas:

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 a photograph and map.

Order aerial photographs and maps.

2968.01

Read maps and aerial photographs.

