

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: FOREST MAPPING  
Code No.: FOR 115-4  
Program: FORESTRY  
Semester: TWO  
Date: JUNE, 1983  
Author: GORDON STONE

New:  Revision:  X

APPROVED:   
Chairperson Date

CALENDAR DESCRIPTION

FOREST MAPPING

FOR 115-4

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COURSE NAME

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COURSE NUMBER

PHILOSOPHY/GOALS:

The overall aim of forest mapping is to teach the skills necessary for the professional presentation of a technical map.

GENERAL OBJECTIVES:

To prepare, use and interpret basic forest maps.

METHOD OF ASSESSMENT (GRADING METHOD):

Evaluation will be based on weekly assignments. There will be no quizzes or tests. All assignments are due in one week. Assignments more than one week late will be given an automatic "I" grade. Attendance expected is 100%.

Grades:                   A - 90% (279 marks)  
                              B - 75% (232 marks)  
                              C - 60% (186 marks)

A student will be permitted to accumulate up to 6 "I" grades. If a student obtains 7 "I" grades, he/she will be given an automatic "R" grade. Any assignment that receives an "I" grade, must be rewritten and handed in one week before the end of the course. A student will be given only one opportunity to rewrite an assignment.

TEXTBOOK(S):

Lab Manual - Forest Mapping

References:

1. Blair, C.L., R.I. Simpson, The Canadian Landscape: Map and Air Photo Interpretation, COPP Clark Pitman.
2. McHarg, I.L., Design with Nature, Natural History Press.
3. Raisz, E., Principles of Cartography, McGraw-Hill.
4. Robinson, A.H., Elements of Cartography, John Wiley & Sons.
5. Thomasson, R.D., Ontario Land Inventory: Wildlife, Ministry of Natural Resources.



OBJECTIVES (COMPETENCY BASED):

Note: Numbers (es: 1.1.1.) refer to Forest Technician Program - Competency Levels.

Communicate Effectively (1.0)

- understand and use correct signs and symbols related to mapping forest, water, land and cultural features (1.1.1)

- demonstrate skill in freehand and mechanical lettering (1.1.6)

Use and interpret basic forest maps es: forest stand, base, topographic, Ontario Land Inventory and Canada Land Inventory maps (1.1.7).

Use related forestry equipment safely and efficiently (3.0).

- use basic drafting equipment such as pencil, pen, T-square, set-squares, scale (metric and Imperial), vernier, Ames lettering guide, mechanical lettering set

- demonstrate skill in line work, area determination (dot grid, line transect, polar planimeter), and drafting a complete map

TOPIC NO.	HOURS/WEEK	TOPIC DESCRIPTION
1	1	<b>Introduction</b> <ul style="list-style-type: none"><li>- purpose and objectives of course</li><li>- method of assessment</li></ul>
2	1	<b>Drafting Instruments and Media</b> <ul style="list-style-type: none"><li>- drafting instruments, types, uses and care</li><li>- drafting media, types and application</li></ul>
3	6	<b>Freehand Lettering</b> <ul style="list-style-type: none"><li>- importance of good lettering in forestry work</li><li>- lettering styles</li><li>- guidelines</li><li>- line work</li></ul>
4	4	<b>Mechanical Lettering</b> <ul style="list-style-type: none"><li>- types, uses and care</li></ul>
5	10	<b>Maps</b> <ul style="list-style-type: none"><li>- importance and types of maps used in forestry</li><li>- Ministry of Natural Resources index numbers</li><li>- National Topographic System</li><li>- Conventional Signs and Forest Cover legend</li><li>- map scales</li><li>- map components</li></ul>
6	4	<b>Area Determination</b> <ul style="list-style-type: none"><li>- cross-section paper, dot grid line transect, polar planimeter</li></ul>
7	6	<b>Field Traverse and Map Plotting</b>



MEIHOD DE ASSESSMENT

Evaluation will be based on weekly assignments. There will be no quizzes or tests. Attendance expected is 100%.

ASSIGNMENTS

MARKS

Freehand Lettering (12 hours)

practice	
dendrology symbols	10
metric symbols	10
metric rules	10
diameters	10
engineer's scale	15

Mapping (10 hours)

azimuth and bearings	15
base map and index numbers	15
Hiawatha Park (base)	20
forest stand map	20
topographic map	25

Area Determination (4 hours)

forest stand map #1	25
forest stand map #2	25

Cruise Notes and Map (2 hours)

Pike Lake	30
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Cutover Traverse (2 hours)

Osden Township	30
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Ski Trail Traverse (2 hours)

field notes and map	50
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310