

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

COURSE OUTLINE

Course Title: FOREST UTILIZATION

Code No.: FOR 204-3

Program: FORESTRY

Semester: III

Date: SEPTEMBER, 1983

Author: BERNEY PRICE

New: X Revision:

APPROVED:

Harv. Robbins
Chairperson

Date

FOREST UTILIZATION
FOR 204-3

CALENDAR DESCRIPTION:

PHILOSOPHY/GOALS:

The student will acquire fundamental knowledge and skills useful in analyzing the terrain found in forested areas of Ontario and relate the growing, managing and harvesting of commercial trees to terrain features and conditions.

METHOD OF ASSESSMENT (GRADING METHOD):

To successfully complete the course the student must have at least a passing grade in each test and an acceptable grade on each of the assignments.

Regular attendance is expected. One written warning will be given to those found absent in two spot checks. Further absences will result in an "R" grade.

An "I" grade indicates an unacceptable test or assignment. Late assignments will be given an automatic "I" grade. "I" grades will be reassigned or rewritten at designated times. Rewrites receiving an acceptable grade will be allotted 45% approximately of the test marks. Rewrites with unacceptable grades may result in an "R" grade. A 10% bonus is given to students attaining at least a passing grade on all tests and assignments on his first try.

Students found copying assignments or cheating on tests will rewrite the test. No marks will be given. If this has occurred previously or if there is a further occurrence, the student will receive an "R" grade. The copier and the copied will both be considered as copied.

Physiographic Site Classification Test:	30% Pass	60%
Soil Theory Test:	30% Pass	60%
Geomorphology Theory Test	22% Pass	55%
Tanonomic Test:	18% Pass	57%

Note: All form categories of the Geomorphology Test must be passed.

GRADING:

Passing grades vary on each test depending on test objectives.

Test marks are sum totalled to give final grade ratings of A, B, C or R.

A - Outstanding achievement - 75% plus of total	C - Acceptable Achievement
B - Consistently above average - 65%	R - Repeat the Course

FOREST UTILIZATION
FOR 204-3

TOPIC NO	PERIODS	TOPIC DESCRIPTION
1	1	Introduction Information cards, course description and applications, evaluation, assignments, grading, texts, references, equipment and supplies.
2	4	Concepts of Soil Definitions, engineering concept, agriculture concept, evolutionary nature of soil, soil profile, soil composition, three-phase system, the pedon mineral component, organic component, soil formation, parent material, climate, living organisms, topography, time
3	3	Soil as a medium for plant growth Factors of plant growth, utilization of the soil by plants, concepts of soil productivity.
4	4	Physical Properties of Soils Soil texture, soil structure, soil consistency, weight, pore space and air relationships, effects of tillage and traffic on soils and plant growth, soil colour, soil temperature.
5	3	Soil Water Energy concept of soil water, plant-soil water relations, soil moisture regimes, fertilizers and water, soil drainage.
6	3	Soil Formation Chemical and mineralogical properties, weathering, clay minerals, soil pH, soil genesis, time, climate, organisms, parent material, topography.
7	6	Physiographic Site Classification Soil texture, field identification of soil texture, pore pattern and soil moisture regime, field trials.

TOPIC NO.	PERIODS	TOPIC DESCRIPTION
8	1	<p>TEST: Physiographic Site Classification Test</p> <p>A lab test on physiographic site classification with emphasis on field identification of soil texture.</p> <p>Evaluation - Pass 60%</p> <p>Marks of three trials are totalled with 80% of marks based on identification of soil textures.</p>
9	1	<p>Soil Theory</p> <p>Soil concepts, origin, properties, management and uses.</p> <p>Evaluation - Pass 60%</p>
10	6	<p>Elementary Geomohology and Terrain Analysis</p> <p>Elementary bedrock geology, glaciology, suficial geology, landforms, airphoto interpretation, diagnostic features, forestry applications.</p>
11	1	<p>TEST: Theory - Geomorphology</p> <p>Rocks, rock structure, glaciology landform identification and features, applications and problems.</p> <p>Evaluation - Pass 60% in each of the four categories to the test, rocks, charts, photos and applications.</p>
12	6	<p>Taxonomic Classification</p> <p>Soil profile, system of soil classification for Canada, taxonomic classification of Ontario soils.</p>
13	1	<p>TEST: Theory</p> <p>Soil divisions, categories, description and location in Ontario</p> <p>Evaluation - Pass 57%</p>

TEXTBOOK(S):

1. Foth, Henry D., Fundamentals of Soil Science, Sixth Edition, Wiley
2. Sen Mathur, B., Gartner, J. F., Geology and its Applications to Airphoto Interpretation
3. Soils of Canada