

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

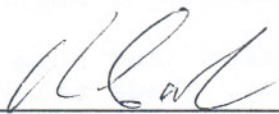
**COURSE TITLE:** DESCRIPTIVE DENDROLOGY

**CODE NO.:** FOR 102-3 **SEMESTER:** I

**PROGRAM:** ABORIGINAL RESOURCE/FORESTRY/FISH & WILDLIFE/  
RENEWABLE RESOURCE/PARKS & OUTDOOR RECREATION TECH.

**AUTHOR:** DON HALL

**DATE:** JUNE 1996 **PREVIOUS OUTLINE DATED:** JUNE 1995

**APPROVED:**   
DEAN, SCHOOL OF SCIENCES &  
NATURAL RESOURCES

May 26, 1996  
DATE



DESCRIPTIVE DENDROLOGY

FOR 102-3

COURSE NAME

COURSE NUMBER

TOTAL CREDIT HOURS: 48

PREREQUISITE(S): NONE

**I. PHILOSOPHY/GOALS:**

A systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and a recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

After successfully completing this course, students should be able to recognize all Northern Ontario, and many Southern Ontario trees when they are in the leafy condition.

**II. STUDENT PERFORMANCE OBJECTIVES:**

Upon successful completion of this course the student will be able to:

1. Identify all major Northern Ontario trees and shrubs in the summer condition.
2. Identify seedlings of major Northern Ontario commercial tree species, and a few non-commercial tree species.
3. Identify, using scientific names, Ontario commercial tree species, to 90% accuracy.
4. Identify the more common of the Southern Ontario and exotic trees.
5. Construct and use an identification key.
6. Associate scientific names with common names for Northern Ontario trees and shrubs.
7. Associate all native Northern Ontario trees (and some shrubs) with silvical characteristics such as longevity, shade tolerance, site requirements and range in Ontario.
8. Appreciate the aesthetic, cultural and historical values of Ontario trees and shrubs.
9. Use the tree species abbreviations most commonly encountered in Ontario.

**III. TOPICS TO BE COVERED:**

1. Identification of deciduous trees and shrubs in the summer condition (ongoing, weeks 1-11)
2. Identification of coniferous trees and shrubs (ongoing, weeks 11-15)
3. Construction and use of keys (2 weeks)
4. Silvical characteristics of trees and shrubs (ongoing, week 1-15)

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**IV. LEARNING ACTIVITIES:**

1. Use textbooks, mounted specimens, study guide and video to study the key identifying features of trees.
2. Participate in at least 4 outings in the Sault College Outdoor Laboratory. These will typically include field instruction in tree/shrub identification and an identification test of species studied in previous weeks.
3. Collect, press and mount leaves of locally common deciduous trees and shrubs.
4. Identify and collect cones and foliage of locally common coniferous trees.
5. Construct a dichotomous key to the leaves of 7 tree or shrub species.
6. Use textbooks and mounted specimens to study the identification and most important silvical characteristics of major southern Ontario tree species.
7. Participate in at least 3 off-campus tree/shrub identification field trips. These will typically include instruction in identification and a field test of species studied in previous weeks.

**V. EVALUATION METHODS:**

A+ - 95; A - 90; B - 80; C - 70;

Tree and Shrub Identification Tests	70%
Theory Tests	20%
Attendance and Assignments	10%

Students should plan on identification tests (either in lab or in the field) virtually every week.

If a class is missed for a good reason, it is important that the student promptly discuss the absence with his/her instructor. If the absence is not explained within a reasonable period of time (typically, one week) the student will receive a grade of zero for any tests missed, and may lose attendance marks as well.

At the instructor's discretion, a rewrite test may be allowed for students combining participation and good attendance with a final mark in the 60% - 70% range. Rewrites will normally consist of a single test (both identification and written material) covering the whole year's work. The highest grade achievable on a rewrite test is "C".

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**VI. REQUIRED STUDENT RESOURCES:**

Farrar, J.L. 1995. Trees in Canada, Canadian Forestry Service. 502 pp.-  
Forestry 102 Descriptive Dendrology Study Guide (available in bookstore)  
Hardhat; Safety Boots; Hand Lens

**VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY  
BOOK SECTION:**

Grimm W.C. Recognizing Native Shrubs, Stackpole P.A. Qk481.G8  
Harlow & Harran & White - Textbook of Dendrology - 6th ed. McGraw Hill  
510 pp. QK481H32  
Hosie, R.C., 1979. Native Trees of Canada, 8th. ed., Canadian Forestry  
Service. 380 pp.  
Montgomery F. H. Trees of the Northern United States & Canada, Frederick  
Wayne & Co., NY 144 pp. QK486C2M6  
Rowe D. S. Forest Regions of Canada, Supply & Services Canada SD145.R6  
Soper, James H. and M. L. Heimburger. Shrubs of Ontario. Royal Ontario  
Museum  
White J. H. Hosie R.C. The Forest Trees of Ontario, 7th ed., MNR  
QK486.05W48

**RESERVE SECTION:**

Hall, D.B. 1989. Video - Conifers and Deciduous Trees in the Summer  
Condition, Sault College

**VIII. SPECIAL NOTES:**

Hard hats must be worn on all field trips. Snowshoes may be required as  
well.

Students with special needs (e.g. physical limitations, visual  
impairments, hearing impairments, learning disabilities) are encouraged  
to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems  
necessary to meet the needs of students.