

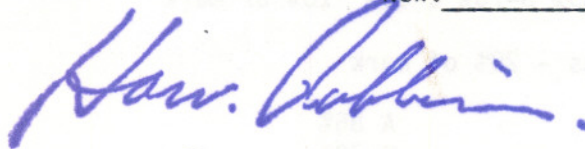
SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: Descriptive Dendrology  
Code No.: FOR 102-4<sup>3</sup>  
Program: Forestry  
Semester: 1  
Date: June, 1983  
Author: Derroll Murphy

New:  Revision: X



APPROVED:

\_\_\_\_\_  
Chairperson

\_\_\_\_\_  
Date

CALENDAR DESCRIPTION

Descriptive Dendrology  
Course Name

FOR 102-4  
Course Number

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 looked at in considerable detail including twig bark and growth characteristics.

After successfully completing this course, students should be able to recognize all Ontario commercial tree species when trees are in the leafy condition as well as a considerable number of less important species.

METHOD OF ASSESSMENT (GRADING METHOD):

Tree Ident: Deciduous - 40% of mark accumulative lab and field tests.  
Coniferous 20% of mark

A 90%  
B 80%  
C 70%

Lecture collection: A-85% B-70% C-50% 10% of mark

Lecture tests: 2 tests - 20% of mark

A 85%  
B 70%  
C 55%

Key Construction Descriptive sheets Drawings - 10% of mark

TEXTBOOK(S):

Hosie, R.C., 1979. Native Trees of Canada, 8th. ed, Canadian Forestry Service, 380 pp.

White, J.H., 1980. 7th ed., The Forest Trees of Ontario, M.N.R., 114 pp.

SPECIFIC OBJECTIVES

Identify as to species by sight, without text or guide, within the allotted time a progressively increasing number of tree and shrub specimens to a maximum of 80. Tests will be frequent and accumulative using plant specimen material in the lab or living specimens in the field.

The ability to identify, collect, preserve, and neatly label dendrology specimens will be demonstrated by submission of a leaf collection to meet the required specifications, standards, and deadline set by the instructor.

The student will be required to achieve 60% on tests which cover lecture material. This will include terminology, construction of a key, nomenclature, classification, botanical features of tree flowers and fruit, and silvics of major western species.

DESCRIPTIVE DENDROLOGY  
FOR 102-4  
LABS

| Topic No. | Periods | Topic Description  | References |
|-----------|---------|--|------------|
| 1         | 3       | <u>Maple Family</u><br>-leaf terms<br>-identification of 6 species<br>-descriptive sheets<br>-chart                    |            |
| 2         | 3       | <u>Birch Family</u><br>-using a key<br>-identification of 5 species<br>-descriptive sheets<br>-short field trip        |            |
| 3         | 3       | <u>Beech Linden and Olive Family</u><br>-identifying with a key, 8 species<br>-descriptive sheets<br>-short field trip |            |
| 4         | 3       | <u>Rose Family</u><br>-identification of 7 species<br>-descriptive sheets<br>-outside test                             |            |
| 5         | 3       | <u>Willow or Poplar Family</u><br>-identification of 8 species<br>-descriptive sheets<br>-drawings                     |            |
| 6         | 3       | <u>Walnut and Elm Families</u><br>-identification of 7 species<br>-descriptive sheets<br>-drawings                     |            |
| 7         | 3       | <u>Shrubs</u><br>-identification of 11 shrubs<br>-wildlife uses<br>-descriptive sheets                                 |            |
| 8         | 3       | <u>Pines</u><br>-identification of 4 species<br>-drawings, foliage and fruit   |            |
| 9         | 3       | <u>Spruce</u><br>-identification of 5 species<br>-descriptive sheets<br>-field trip                                    |            |

DESCRIPTIVE DENDROLOGY

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LABS

| Topic No. | Periods | Topic Description   | References |
|-----------|---------|---|------------|
| 10        | 3       | <u>Fir and Cedar</u><br>-identification of 4 species<br>-descriptive sheets<br>-field trip                    |            |
| 11        | 3       | <u>Larch and Hemlock</u><br>-identification of 3 species<br>-descriptive sheets<br>-field test                |            |
| 12        | 3       | <u>Field Trip</u><br>-review of conifers<br>-major outside test   |            |
| 13        | 3       | <u>Western Pines</u><br>-identification of 5 species<br>-comparison with eastern pines<br>-descriptive sheets |            |
| 14        | 3       | <u>Western Spruce, Fir, Hemlock and Cedar</u><br>-identification of 6 species<br>-descriptive sheets          |            |
| 15        | 3       | <u>Miscellaneous Species</u><br>-a look at approximately 20 species<br>-southern and exotic                   |            |

DESCRIPTIVE DENDROLOGY

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LECTURES

| Topic No. | Periods | Topic Description  | References |
|-----------|---------|--|------------|
| 1         | 1       | <u>Course Outline</u><br>-Explanations of handouts, leaf collection, marking, etc. |            |
| 2         | 2       | <u>Keys</u><br>-construction and use of keys                                       |            |
| 3         | 1       | <u>Nomenclature</u><br>-why and how species are named                              |            |
| 4         | 1       | <u>Classification of plants</u><br>-history and use of classification              |            |
| 5         | 1       | <u>Flowers and Fruit</u><br>-details on species studied in labs                    |            |
| 6         | 1       | <u>Conifers</u><br>-botanical features of Pinaceae family                          |            |
| 7         | 2       | <u>Forest Regions</u><br>-8 regions<br>-local sections                             |            |
| 8         | 1       | <u>Movie</u><br>-Tree Portraits<br>-Boreal Forests                                 |            |
| 9         | 2       | <u>Silvics</u><br>-silvics of major western species                                |            |