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

COURSE OUTLINE


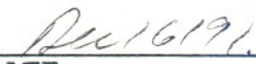
COURSE TITLE: DESCRIPTIVE DENDROLOGY

CODE NO.: FOR 102-3 SEMESTER: I

PROGRAM: FORESTRY

DATE: DECEMBER 1991 PREVIOUS OUTLINE DATED: JUNE 1991

AUTHOR: DERROLL MURPHY/DON HALL

APPROVED:  

DEAN DATE

DESCRIPTIVE DENDROLOGY

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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 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.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

1. Identify all major Ont. deciduous tree species in the leafy condition
2. Identify all native Ont. coniferous tree species as well as the more common exotics and Western Canadian species.
3. Construct and use a key for ID.
4. Know scientific names for commercial Ont. tree species.
5. Discuss forest regions of Canada and the major tree species of each region.
6. Discuss nomenclature and classification of trees and shrubs.

III. TOPICS TO BE COVERED:

1. Identification of deciduous trees by leaf features.
- ongoing, weeks 4 - 14
2. Identification of coniferous trees by leaf, bark silhouette and fruit
- weeks 1 - 4
3. Silvics of major Western Canadian tree species. - 1 period
4. How trees are named and classified. - 1 period
5. Ranges of tree species. - ongoing for 15 weeks

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IV. LEARNING ACTIVITIES:

1. Construct a dichotomous key for the identification of seven predetermined tree species. - 2 periods
2. Describe physiological processes such as: tropisms and sprouting. - 1 period
3. Explain derivation and use of scientific names for the flora. - 1 period
4. Compare and contrast flowers and fruit under the following headings: Features, Types and Functions. - 1 period
5. List silvical characteristics common to coniferous species. - ongoing, weeks 1 - 4
6. Identify, locate and describe major forest regions, and list the major tree species of each. - 2 periods
7. Describe silvical characteristics of major, Western Canadian tree species. - Assignment, week 2
8. Identify the following twenty commercially important tree species in the leafy condition to a 90% accuracy: - ongoing, weeks 4 - 15

Ce	Ew	Po	Bd	Bf	Mh	Ms	Ta	Aw	Ab	Or
	Ow	He	Pj	Pr	Pw	Sb	Sw	Bw	By	
9. Associate scientific names with common names for trees and shrubs native to Ontario. - ongoing, whole semester
10. Given the common name for twenty commercially important tree species, write the accepted species abbreviations. - 1 period
11. Identify up to fifty-five deciduous tree and shrub species by leaf, and up to twenty-five coniferous species by leaf, twig and fruit. (Required resources - Riker mounts, laminations, field trips) - ongoing whole semester

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V. EVALUATION METHODS:

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

Identification/Lecture Tests: - 70% of mark

Assignments and quizzes: - 20% of mark

Attendance: - 10% of mark

Tests will be frequent and accumulative. If a test is missed for a good reason, be sure to notify the instructor so you will not be given zero for that particular test. If more than two tests are missed without a satisfactory reason, student will be subject to a fast R.

A rewrite will be necessary if a minimum of a C grade is not obtained. To be eligible for a rewrite, marks must be within 10% of a C grade.

The highest grade obtainable if a rewrite is required is a C. Handins are required at most classes therefore students should attend all classes.

VI. REQUIRED STUDENT RESOURCES:

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

Forestry 102 Descriptive Dendrology Study Guide (available in bookstore)

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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

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

Urquhart F. A. The Ontario Leaf Album Univ. of Toronto Press 72 pp.
QK486O5U7

White J. H. Hosie R.C. The Forest Trees of Ontario 7th ed., MNR
QK486.05W48

VIII. SPECIAL NOTES:

Hard hats must be worn on all field trips. Snowshoes may be needed.

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.