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

# COURSE OUTLINE

COURSE TITLE:	DESCRIPTIVE DENDR	OLOGY II	
CODE NO.:	FOR 107-3	SEMESTER:	2
PROGRAM:	FORESTRY		
AUTHOR:	MARK HARVEY		
DATE:	JUNE 1994	PREVIOUS OUTLINE DATED:	MAY 1993

APPROVED:

DEAN

DATE



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DESCRIPTIVE DENDROLOGY II

FOR107-3

COURSE NAME

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TOTAL CREDIT HOURS: 48

PREREQUISITE(S): FOR102-3

### I. PHILOSOPHY/GOALS:

Students will gain the skill of winter identification of major tree and shrub species that are representative of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of plant species.

## **II. STUDENT PERFORMANCE OBJECTIVES:**

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

- 1. Identify, in the winter condition important deciduous tree and shrub species indigenous to Ontario.
- 2. Identify, in the winter conditions, selected exotic deciduous tree species commonly planted in Ontario.
- 3. Identify selected herbs in the summer condition that are representative of important forest site types found in Central and Northern Ontario.
- 4. Recognize key identification features found on the stems, overwintering buds, foliage and flowering structures of herbs, shrubs and trees common in Ontario.
- 5. List components of applied seed biology.
- 6. List the important silvical characteristics of major tree and shrub species found in Ontario.
- 7. Using an ecological approach, discuss the structure and development of important stand types and plant associations found in Ontario.

#### III. TOPICS TO BE COVERED:

- 1. Identification of trees and shrubs in the winter condition including seed bearing structures.
- 2. Identification of herbs in the summer condition.
- 3. Silvical characteristics of selected tree species.
- 4. Applied seed biology.
- 5. Morphological characteristics of stems and flowers used for plant identification purposes.
- 6. Forest stand development and structure from early to late succession.
- 7. The site requirements of important plant associations of the Boreal and Great Lakes St. Lawrence Forest Regions.
- 8. Climatic, geological and biological characteristics of some forest regions of Ontario.

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#### IV. EVALUATION METHODS:

Tree, Shrub and Plant identification tests.	70%.
Attendance and Participation	10%
Lecture Test	20% 100%

There will be eight (8) plant identification tests. A student's best seven (7) will be used in calculating the final grade.

There will be no rewrite tests except for medical or compassionate reasons.

#### V. REQUIRED STUDENT RESOURCES:

Hall, Don 1993. Descriptive Dendrology, FOR107 Study Guide, for classroom delivery, School of Sciences & Natural Resources, Sault College, 159pp.

\* Hall, Don 1993. <u>Descriptive Dendrology, FOR107 Study Guide</u>, for Distance Education delivery, School of Sciences & Natural Resources, Sault College, 159pp.

Hosie R. C., 1979. Native Trees of Canada, 8th. ed., Can. Forest. Ser. 380 pp.

Peterson & Mckenny, 1968. <u>A Field Guide to Wildflowers</u>, Houghton Mifflin, 420 pp.

\* Foster, S. & A. Duke. Peterson Field Guide to Medicinal Plants (Eastern Central). 1990. Houghton Miflin Publishers. ISBN 0-395-46722-5

\* Kavasch, E.B. <u>Guide to Northern Wild Edibles</u>. 1981. Hancock House Publishing Co., Vancouver, B.C. ISBN 0-888-39-090-4

\* Soper, J.H. & Heimburger, M.L. 1985. <u>Shrubs of Ontario</u>. Royal Ontario Museum

(\* for Distance Ecucation Students only)

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

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Anonymous: <u>Seeds of Woody Plants in the United States</u>, U.S. Dept. of Agriculture Handbook, 450-883 pp. SD402.U5

Arnold L.N., Martin A.C., Herbert S.Z.: <u>American Wildlife & Plants</u>, General Publishing, 500 pp. QL756.M27 (One copy is available for library use only, ask at the main desk.

Baldwin, K.A. and Sims, R.A. 1989. <u>Common Forest Plants in Northwestern</u> <u>Ontario</u>. Forestry Canada - O.M.N.R., NWOFTDU Thunder Bay, Ont. <u>344pp</u>.

Fowells H.A.: <u>Silvics of Forest Trees of the United States</u>, U.S. Dept. of Agriculture. SD395.U5

Grimm W.C.: <u>Recognizing Native Shrubs</u>, Stackpole Penn. 1966 QK481.G8

Harlow Harrar & White: <u>Textbook of Dendrology</u>, 6th ed., McGraw Hill, 510 pp. OK481.H32

Peterson & Mckenny, 1968. <u>A Field Guide to Wildflowers</u>, Houghton Mifflin, 420 pp.

Sims, R.A., Kershaw, H.M, and Wickware, G.M. 1990. <u>The Autecology of Major</u> <u>Tree species in the North Central Region of Ontario.</u> N.W. Ont. For. Tech. Dev. Unit, O.M.N.R., Thunder Bay, Ont. - For. Dan. Sault Ste. Marie, Ont. COFRDA REP. 3302 NWOFTDU TECH. REP. 48 126pp.

Soper, J.H., Heimburger, M.L., 1985. <u>Shrubs of Ontario</u>. Royal Ontario Museum

#### VII. SPECIAL NOTES:

Safety boots, hard hats and proper winter clothing are required for all outdoor lab work.

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.