SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY					
	SAULT ST	TE. MARIE, ON			
COURSE OUTLINE					
<u>COURSE TITLE:</u> TREES AND HERBACEOUS PLANTS					
CODE NO.:	NRT107	SEMESTER:	2		
PROGRAMS:	FORESTRY, PARKS & OUTDOOR RECREATION, FISH & WILDLIFE TECHNICIAN, ABORIGINAL RESOURCE TECHNICIAN				
AUTHOR:	DON HALL				
DATE:	NOV 1999	PREVIOUS OUTLINE DATED:	JAN 1999		
APPROVED: DEAN DATE					
TOTAL CREDITS: 3	3	PREREQUISITE(S): None			
LENGTH OF COURSE: 3 hrs/week X 16 weeks					
TOTAL CREDIT HOURS: 48					
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TREES AND HERBACEOUS PLANTS

NRT107

COURSE NAME

CODE NO.

# I. COURSE DESCRIPTION:

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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 tree, shrub and herbaceous plant species.

# **II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon completion of this course the student will demonstrate the ability to:

1. Identify in the winter condition, all deciduous trees and shrubs commonly encountered in northern Ontario woodlands.

### Potential Elements of the Performance

- for a particular tree or shrub:
  - assess features including buds, twigs, bark, silhouette, and ecological associations
  - determine which features are best applied to the identification task at hand
  - apply knowledge of and experience with key features to correctly identify the tree or shrub
- correctly spell common names of all deciduous trees and shrubs commonly encountered in northern Ontario woodlands
- associate common names with Latin names for all deciduous trees and shrubs commonly encountered in northern Ontario woodlands
- recognize the seeds and seedlings of the most common deciduous trees in Ontario woodlands

This learning outcome will count for approximately 45% of the final mark

2. Associate key identification features with the common names of commercially important western Canadian coniferous trees.

# Potential Elements of the Performance

- recognize which western Canadian conifers are most commercially important
- associate key features with common names

This learning outcome will count for approximately 6% of the final mark

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3. Construct graphics-based twig keys to family groups of deciduous trees and shrubs commonly encountered in northern Ontario woodlands.

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### Potential Elements of the Performance

- evaluate the relative values of key features used to differentiate twigs
- arrange key features into a hierarchical structure
- concisely and neatly illustrate the hierarchical structure in the form of a graphic, dichotomous key

This learning outcome will count for approximately 7% of the final mark

4. Identify twigs using dichotomous keys

### Potential Elements of the Performance

- associate technical terms with their definitions
- evaluate options set forth in a dichotomous word key
- follow a dichotomous word key in an orderly, systematic manner

This learning outcome will count for approximately 5% of the final mark

5. Identify 54 dwarf woody or herbaceous plants commonly encountered in northern Ontario woodlands.

### Potential Elements of the Performance

- assess features such as flower colour, flower structure, size, configuration of leaves and overall appearance.
- determine which features are best applied to the identification task at hand
- apply knowledge of and experience with key features to correctly identify the plant

This learning outcome will count for approximately 25% of the final mark

6. Associate all native northern Ontario deciduous trees (and some shrubs) with silvical characteristics such as longevity, shade tolerance, site requirements and range in Canada.

This learning outcome will count for approximately 12% of the final mark

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# **III. TOPICS:**

Note: These topics will not necessarily be explored as isolated learning units, or in the order presented below:

- 1. Construction of graphic-based keys
- 2. Use of dichotomous word keys
- 3. Identification of deciduous trees and shrubs commonly encountered in northern Ontario woodlands
- 4. Identification of dwarf woody or herbaceous plants commonly encountered in northern Ontario woodlands.
- 5. Key features of commercially important western Canadian coniferous trees.

# **IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

- 1. Farrar, J.L. 1995. Trees in Canada, Canadian Forestry Service. 502 pp.
- 2. Forestry 107 Trees and Herbaceous Plants Study Guide (available in bookstore)
- 3. Chambers, Legacy and Bentley. 1996. Forest Plants of Central Ontario. Lone Pine Publishing.
- 4. Hall, Don 1998. Trees and Herbaceous Plants, FOR107 Study Guide, for Distance Education delivery, School of Natural Resources, Sault College, 159pp.
- 5. Hardhat, Safety Boots.

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### V. EVALUATION PROCESS/GRADING SYSTEM:

Tree, Shrub and Plant Identification Tests	72%.
Lecture Tests	20%
Attendance, Participation and Assignments	8%
Total	100%

#### **Grading System**

A+	Consistently Outstanding	(95% - 100%)
А	Outstanding Achievement	(90% - 95%)
В	Consistently Above Average Achievement	(80% - 90%)
С	Satisfactory or Acceptable Achievement in all	(70% - 80%)
	areas subject to assessment	
R	Repeat - The student has not achieved the	(Less than 70%)
	objectives of the course and the course must be	
	repeated	
CR	Credit Exemption	
Х	A temporary grade, limited to situations with	
	extenuating circumstances, giving student	
	additional time to complete course requirements	

#### Notes:

- Students should plan on identification tests (either in lab or in the field) virtually every week.
- Students may be assigned an "R" grade early in the course for unsatisfactory performance.
- The 70% passing level is in accordance with governmental and industrial standards.
- 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
- Hard hats must be worn on all field trips
- Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.
- 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 semester's work. The highest grade achievable on a rewrite test is "C".

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# VI. SPECIAL NOTES:

#### Special Needs

If you are a student with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717, 491 so that support services can be arranged for you.

#### Retention of Course Outlines

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

#### Plagiarism

Students should refer to the definition of "academic dishonesty" in the "Statement of Student Rights and Responsibilities". Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided be the professor.

Substitute Course Information is available at the Registrar's Office.

### VII. PRIOR LEARNING ASSESSMENT

Students who wish to apply for advanced credit in the course should consult the instructor.