

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



Sault College

**COURSE OUTLINE**

**COURSE TITLE: TREES AND SHRUBS**

**CODE NO. : NRT101 SEMESTER: 1**

**PROGRAM: FORESTRY, PARKS & OUTDOOR RECREATION,  
FISH & WILDLIFE, FIELD NATURALIST, ECOSYSTEM  
SURVEYS, FOREST MEASUREMENT SKILLS,  
INTRODUCTION TO NATURAL RESOURCES, PARK  
OPERATION SKILLS**

**AUTHOR: DON HALL**

**DATE: JUNE 2007 PREVIOUS OUTLINE DATED: JUNE  
2006**

**APPROVED:**

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**DEAN**

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**DATE**

**TOTAL CREDITS: 3**

**PREREQUISITE(S): NONE**

**HOURS/WEEK: 3**

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*For additional information, please contact Colin Kirkwood, Dean,  
School of Technology, Skilled Trades and Natural Resources  
(705) 759-2554, Ext.2688*

**I. COURSE DESCRIPTION:**

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and 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 tree species in the summer condition.

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

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

1. Identify in summer condition, all trees and shrubs commonly encountered in northern Ontario woodlands.

Potential Elements of the Performance:

- for a particular tree or shrub:
  - assess features including leaves, 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 trees and shrubs commonly encountered in northern Ontario woodlands
- associate common names with Latin names for all trees and shrubs commonly encountered in northern Ontario woodlands

*This learning outcome will count for approximately 65% of the final mark*

2. Associate all native northern Ontario 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 20% of the final mark*

3. Identify, collect, press and mount leaves of 28 deciduous trees and shrubs commonly encountered in northern Ontario

Potential Elements of the Performance:

- using appropriate books, identify trees in the field
- collect representative leaves from each species identified
- using a press of the students own design, dry leaves in a manner that prevents discoloration and preserves the original shape of the leaf
- neatly mount and label pressed leaves

*This learning outcome will count for approximately 10% of the final mark*

4. Identify the leaves of trees and shrubs most commonly encountered in southern Ontario woodlands and urban areas.

Potential Elements of the Performance:

*Potential Elements of the Performance:*

- for a particular leaf:
  - assess features including color, outline, texture, venation and size
  - determine which features are best applied to the identification task at hand
  - apply knowledge of and experience with key features to correctly identify the leaf
- correctly spell common names of trees and shrubs most commonly encountered in southern Ontario woodlands and urban areas.

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

5. Identify, using Latin names, foliage of Ontario commercial tree species to 90% accuracy

Potential Elements of the Performance:

- for a particular foliage sample:
  - assess features including color, outline, texture, venation and size
  - determine which features are best applied to the identification task at hand
  - apply knowledge of and experience with key features to correctly identify the foliage
  - correctly spell Latin names of Ontario commercial treespecies

This learning outcome will be graded throughout the course.

### III. TOPICS:

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

1. Identification of trees and shrubs commonly encountered in northern Ontario
2. Collection, pressing, mounting and labeling of leaves
3. Aesthetic, cultural and historical values of Ontario trees and shrubs
4. Key features of the leaves of trees and shrubs most commonly encountered in southern Ontario woodlands and urban areas
5. Silvical characteristics of native northern Ontario trees and shrubs

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

1. Farrar, J.L. 1995. Trees in Canada, Canadian Forestry Service. 502 pp.
2. Hall, Don 2007. NRT101 Trees and Shrubs Identification Study Guide (available in bookstore)
3. Hardhat , safety boots, reflective vest.

**V. EVALUATION PROCESS/GRADING SYSTEM:**

Tree and Shrub Identification Tests	64%.
Leaf Collection	10%
Attendance, Participation and Assignments	4%
Lecture Tests	21%
Total	100%

The following semester grades will be assigned to students:

<b>Grade</b>	<b><u>Definition</u></b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

**VI. SPECIAL NOTES:**

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

Students may be assigned an “F” grade early in the course for unsatisfactory performance.

On tests and collections, correctly identifying 65% of the specimens is equivalent to a mark of 50%; which is the passing level for the course. Mark equivalents increase in a linear fashion, meaning that 94% of the specimens must be identified correctly to achieve a mark of 90%, the A+ level for the course. A simple conversion chart will allow students to readily convert their test results to college standardized mark equivalents.

The 65% passing level on tests and collections is intended to meet the needs of employers in both the public and private sectors.

Hard hats must be worn on all field trips.

All assignments must be prepared on a word processor. Handwritten assignments will not be accepted.

Bus or van transportation is provided for all field trips away from the main campus. Use of personal vehicles on field trips will only be allowed with the written permission of the instructor. Excepting those with written permission, students who do not travel on the bus or van will not be allowed to participate in field activities, or write field tests.

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 and in exceptional circumstances, a rewrite test may be allowed for students combining participation and good attendance with a final mark in the 45 - 50% range. Rewrites will normally consist of a single test (both identification and written material) covering the entire semester's work. The highest grade achievable on a rewrite test is "C".

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 postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. 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/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.