# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



# **COURSE OUTLINE**

**COURSE TITLE:** Trees and Herbaceous Plants Identification

CODE NO.: NRT 133 SEMESTER: 2

**PROGRAM:** Forest Conservation Technician, Adventure Recreation

and Parks, Fish & Wildlife Conservation Technician, Ecosystem Surveys – Field Skills, Field Naturalist, Park

Operations

**AUTHOR:** Robert Routledge (modified after D. Hall)

DATE: Dec 2009 PREVIOUS OUTLINE DATED: Nov 2008

APPROVED: "B. Punch"

CHAIR DATE

TOTAL CREDITS: 3

PREREQUISITE(S): None

HOURS/WEEK: 3

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Natural Environment/Outdoor Studies & Technology Programs

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#### I. COURSE DESCRIPTION:

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 central and northern Ontario forests. 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 successful completion of this course, the student will demonstrate the ability to:

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

### Potential Elements of the Performance:

- for a particular tree or shrub:
  - 1. assess features including buds, twigs, bark, silhouette, and ecological associations
  - 2. determine which features are best applied to the identification task at hand
  - 3. apply knowledge of and experience with key features to correctly identify the tree or shrub
- correctly spell common names
- associate common names with scientific names

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

Approximately 6% of the final mark

3. Construct twig keys to family groups of deciduous trees and shrubs commonly encountered in central and northern Ontario.

### Potential Elements of the Performance:

- determine key twig features used to discriminate among species within family groups
- use key twig features to design graphical and word-based dichotomous keys

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

Approximately 5% of the final mark

5. Identify dwarf woody or herbaceous plants commonly encountered in central and northern Ontario.

## Potential Elements of the Performance:

- assess features such as flower colour, structure and 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

Approximately 25% of the final mark

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

Approximately 12% of the final mark

#### III. TOPICS:

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

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

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

- 1. Farrar, J.L. 1995. *Trees in Canada*, Canadian Forestry Service. 502 pp
- 2. Hall, Donald B. 2009. NRT 133 Trees and Herbaceous Plants Identification Study Guide (available in campus shop)
- 3. Chambers, Legasy and Bentley, 1996. Forest Plants of Central Ontario. Lone Pine Publishing.
- 4. Hardhat with proper liner, reflective vest, safety boots (when appropriate), snowshoes
- 5. Useful resources will be posted on LMS course site periodically

# V. EVALUATION PROCESS/GRADING SYSTEM:

Assignments/Identification Tests 80% Lecture Tests 20%

Total 100%

**NOTE:** Assignments will be reduced at a rate of **10% per day** for late submissions for a period of 5 days after the due date. After 5 days, the assignment value will be zero.

**NOTE:** As there will likely be tests each week during lab sessions, attendance during each LAB is **MANDATORY.** 

**NOTE:** Students missing a lab or lecture test may have one opportunity to make-up that week's test within 10 days of the missed session, after which a zero will be applied. The 10 day period may be extended under extenuating circumstances at the discretion of the instructor. IT IS UP TO THE STUDENT TO CONTACT THE INSTRUCTOR IF THEY INTEND ON WRITING A MAKE-UP FOR A MISSED TEST. No make-ups will be allowed for field trip assessments scheduled off-campus.

Extra-credit opportunities may be provided during the semester.

		Grade Point
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>
A+ A	90 – 100% 80 – 89%	4.00
В	70 - 79%	3.00
С	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:

### 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.

## **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.

# **Prior Learning Assessment:**

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

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

#### **Disability Services:**

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

## 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*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

# Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to https://my.saultcollege.ca.

#### Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

#### Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

#### **Tuition Default:**

Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of *March* will be removed from placement and clinical activities. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

# Course Outline Amendments:

- The INSTRUCTOR reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.
- Although passing Trees and Shrubs Identification (NRT101) is not a prerequisite, students who have not at least attempted NRT101 may find Trees and Herbaceous Plants quite difficult.
- Students may be assigned an "F" grade early in the course for unsatisfactory performance.
- As in NRT101, correctly identifying 65% of the specimens is equivalent to a mark of 50%; which is the passing level for the course. A simple conversion chart (posted on LMS) will allow students to readily convert their test results to college standardized mark equivalents.
- Hard hats and reflective vests must be worn on all field trips (including the woodlot) – toques under hard hats ARE NOT ACCEPTABLE
- Bus or van transportation is provided for all field trips away from the main campus. Use of personal vehicles on field trips is allowed only if the instructor is contacted at least one week prior to the scheduled field trip. The student driving their vehicle WILL NOT BE ALLOWED TO TRANSPORT OTHER STUDENTS, ONLY THEMSELVES TO AND FROM scheduled field trips.