

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 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 successful completion of this course, the student with the assistance of a Learning Specialist will demonstrate the ability to:

1. Identify in the winter condition, all deciduous trees and shrubs commonly encountered in northern Ontario woodlands based on a modified list developed for the individual student.

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

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

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

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 dwarf woody or herbaceous plants commonly encountered in northern Ontario woodlands based on a modified list developed for the individual student.

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

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 keys
3. Identification of deciduous trees and shrubs commonly encountered in northern Ontario woodlands
4. Identification of dwarf woody and 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. Hall, Donald B. 2008. *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, reflective vest, safety boots.

V. EVALUATION PROCESS/GRADING SYSTEM:

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| Tree, Shrub and Plant Identification Tests | 75% |
| Lecture Tests | 21% |
| Twig Key Test | 4% |
| Total | 100% |

The following semester grades will be assigned to students:

| Grade | <u>Definition</u> | <i>Grade Point Equivalent</i> |
|--------------|---|-------------------------------|
| A+ | 90 – 100% | 4.00 |
| A | 80 – 89% | 3.00 |
| B | 70 - 79% | 2.00 |
| C | 60 - 69% | 1.00 |
| D | 50 – 59% | 0.00 |
| F (Fail) | 49% and below | |
| CR (Credit) | Credit for diploma requirements has been awarded. | |

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| 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:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 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 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.

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. New students are advised to consult with the instructor before registering for this course.

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.

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 and reflective vests must be worn on all field trips

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.

At the instructor's discretion, a rewrite test may be allowed for students combining participation and good attendance with a final mark within 5% of the passing level. 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".

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

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 Chair's secretary. Students will be required to provide a transcript and course outline related to the course in question.

CICE Modifications:

Preparation and Participation

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
3. Study notes will be geared to test content and style which will match with modified learning outcomes.
4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

1. Tests, which require essay answers, may be modified to short answers.
2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

1. Read the test question to the student.
2. Paraphrase the test question without revealing any key words or definitions.
3. Transcribe the student's verbal answer.
4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

1. Use a question/answer format instead of essay/research format
2. Propose a reduction in the number of references required for an assignment
3. Assist with groups to ensure that student comprehends his/her role within the group
4. Require an extension on due dates due to the fact that some students may require additional time to process information
5. Formally summarize articles and assigned readings to isolate main points for the student
6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.