SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Trees and Herbaceous Plants Identification CODE NO. : **NRT133** SEMESTER: Winter **PROGRAM:** Adventure Recreation and Parks Technician, Fish & Wildlife Conservation Technician, Forest Conservation Technician, Natural Environment Technician/Technologist AUTHOR: **Robert Routledge** DATE: Dec 2011 PREVIOUS OUTLINE Dec 2010 DATED: **APPROVED:** "B.Punch" CHAIR DATE TOTAL CREDITS: 3 PREREQUISITE(S): None HOURS/WEEK: 3 Copyright ©2011 The Sault College of Applied Arts & Technology Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.

For additional information, please contact Brian Punch, Chair, Environment and Design School of Technology and Natural Resources

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I. COURSE DESCRIPTION:

Students will gain the skill of winter identification of representative Ontario woody angiosperm trees and shrubs. Students will also identify focal native herbaceous and dwarf woody plants and introduced non-aquatic woody and herbaceous plants considered especially invasive. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of woody 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 angiosperm trees and shrubs native to Ontario (and a few introduced) in winter condition.

Potential Elements of the Performance:

- for a particular tree or shrub:
 - assess features including twigs, bark, flowering and fruiting structures, growth form 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
 - use correct terminology to describe key features
 - correctly spell common names and scientific names

approximately 63% of the final mark

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

Potential Elements of the Performance:

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

approximately 7% of the final mark

3. 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 10% of the final mark

4. Identify focal herbaceous and dwarf woody plants and introduced nonaquatic woody and herbaceous plants considered especially invasive.

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 20% 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 angiosperm trees and shrubs commonly encountered in central and northern Ontario
- 4. Identification of native herbaceous and dwarf woody plants
- 5. Identification of non-aquatic woody and herbaceous plants considered especially invasive
- 6. Key features of commercially important western Canadian gymnosperms

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- Farrar, J.L. (1995). <u>Trees in Canada</u>, Fitzhenry and Whiteside Limited/Canadian Forest Service
- Hardhat with appropriate winter liner, reflective vest, snowshoes, safety boots (when appropriate)

V. EVALUATION PROCESS/GRADING SYSTEM:

Identification tests/quizzes/assignments80.0%Lecture tests/quizzes20.0%

The following semester grades will be assigned to students:

Note that the <u>passing grade for this course is 65%</u>. The 65% passing level is intended to meet the needs of employers in both the public and private sectors. Your <u>final mark will be converted to reflect this</u> (see below).

Grade Before Conversion	<u>Final Grade</u> (College Equivalent)	<u>Final Letter</u> <u>Grade</u>	<u>Grade Point</u> Equivalent
< 64.5%	<50%	F	0.00
64.5	50.0	D	1.00
71.4	58.6	D	1.00
71.5	60.0	С	2.00
78.4	68.6	С	2.00
78.5	70.0	В	3.00
85.4	78.6	В	3.00
85.5	80.0	Α	4.00
≥ 92.5	90.0	A+	4.00

CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject area.	
U	Unsatisfactory achievement in field 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:

• 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.