

I. COURSE DESCRIPTION:

Tree Marking and Scaling is designed to introduce students to the basic concepts of tree marking and wood measurement. It will prepare students to meet provincial standards for operational tree marking in Ontario. Students taking this course may be eligible to be tested for provincial tree marking certification through a cooperative arrangement with the Ontario Ministry of Natural Resources and Forestry (OMNR&F). The wood measurement portion of this course will be according to the OMNR&F Provincial Scaling Manual and will serve to introduce students to scaling concepts. Interested students may complete the Provincial **scaler's** licence immediately upon graduation through Algonquin college in Pembroke. The Provincial tree marking certification course and the scaling licence are not a part of this course and must be completed separately by interested students on their own at their own expense. The natural environment resource department may assist in providing opportunities for students to be certified and licensed by the OMNR&F.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1 Understand and apply the silvicultural and management principles and guidelines for tolerant hardwood stands in Ontario

- Potential Elements of the Performance
- List the silvical characteristics of tolerant hardwood species in Central Ontario
- Understand and identify timber and non timber values found in tolerant hardwood stands
- List the key objectives of and components of the tolerant hardwood tree marking program in Ontario
- Properly identify key information sources available to assist tree markers in tolerant hardwoods
- Identify, describe and compare key silvicultural systems used to manage hardwood stands

This will constitute 20% of the courses grade

- 2 Mark trees in tolerant hardwood stands according to provincial standards

Potential Elements of the Performance:

- Identify tree defects
- Identify stick nests, cavity trees and a wide range of other wildlife habitat values in tolerant hardwood stands
- Classify hardwood trees as AGS OR UGS
- Use a prism to make basal area determinations
- Mark trees according to a silvicultural prescription and provincial requirements.

This will constitute 20% of the courses grade

- 3 Understand and apply the silvicultural and management principles and guidelines for managing the white pine working group in Ontario

Potential Elements of the Performance:

- List the silvical characteristics of conifer species found in the white pine working group in Ontario
- Understand and identify the timber and non timber values found in the white pine working group
- List the key objectives of and components of the white pine tree marking program in Ontario
- Properly identify key information sources available to assist tree markers for the white pine working group.
- Identify, describe and compare key silvicultural systems used to manage the white pine working group

This will constitute 20% of the courses grade

- 4 Mark trees in white pine stands according to and provincial standard

Potential Elements of the Performance:

- Identify tree defects
- identify stick nests, cavity trees and other wildlife habitat values
- Classify trees as AGS or UGS
- Using regeneration cut, uniform shelterwood specifications select crop trees, space and mark trees using % spacing factor and crown spacing as a guide.
- Mark trees according to silvicultural prescriptions and provincial standards.

This will constitute 20% of the courses grade

5. Measure wood according to the Crown Forest Sustainability Act and the provincial “Manual of Scaling Instructions”

Potential Elements of the Performance

- Describe and understand the basic methods and principles of wood measurement in Ontario for the Ministry of Natural Resources.
- Perform basic wood measurements in the Cubic Method and Cube Grade Method of Scaling as per the Ministry’s Scaling Manual.

This will constitute 20% of the courses grade

III. TOPICS

- 1, ecology, silviculture and management of tolerant hardwood stands
- 2, ecology, silviculture and management of white pine stands
- 3, AGS, UGS and defect classification
- 4 tree marking for wildlife and habitat values
- 5, marking hardwood stands field trips to Dennis TWP
- 6, marking white pine stands field trips to Wells TWP
- 7, wood measurement principles and methods
- 8, commercial tree species log identification

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- 1, Provincial Tree Marking Guide 2004 OMNR VERSION 1.1
- 2, Forest Raptors, Their Nests in Central Ontario

Resource materials supplied by the college

- 1, A Silvicultural Guide for the Tolerant Hardwood Forest in Ontario
- 2, A Silvicultural Guide to Managing Southern Ontario Forests
- 3, Scaling manual
- 4, A Silviculture Guide for the Great Lakes –St. Lawrence Conifer Forest in Ontario

V. EVALUATION PROCESS/GRADING SYSTEM:

The following semester grades will be assigned to students in post secondary courses:

1, hardwood tree marking practical	15%
2, pine tree marking practical	15
3, tree marking written test	30
4, tree defect quiz	10
5, tree defect test	10
6, scaling & log identification test	<u>20</u>
	100%

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 - 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 - 59%	1.00
F (Fail)	49% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject areas.	
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 penalty	

VI. SPECIAL NOTES: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.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers may not be granted admission to the room.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.