

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



Sault College

**COURSE OUTLINE**

<b><u>COURSE TITLE:</u></b>	Fall Camp – 2 <sup>nd</sup> Year Forestry		
<b><u>CODE NO. :</u></b>	NRT 252	<b><u>SEMESTER:</u></b>	Three
<b><u>PROGRAM:</u></b>	Forestry Technician		
<b><u>AUTHOR:</u></b>	Mark Harvey		
<b><u>DATE:</u></b>	May 2009	<b><u>PREVIOUS OUTLINE DATED:</u></b>	May 2008
<b><u>APPROVED:</u></b>	"B. Punch"		
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		<b>CHAIR</b>	<b>DATE</b>
<b>TOTAL CREDITS:</b>	2		
<b>PREREQUISITE(S):</b>	none		
<b>LENGTH OF COURSE:</b>	1 week		
		<b>TOTAL CREDIT HOURS:</b>	40

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*For additional information, please contact Brian Punch, Chair School of Natural  
Environment/Outdoor Studies & Technology Programs  
School of Technology, Skilled Trades & Natural Resources*

*(705) 759-2554, Ext.2681*

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Code No.**I. COURSE DESCRIPTION:**

Students will carry out practical exercises and perfect outdoor skills as they relate to a forest technician. Exercises are drawn from the Trees & Shrubs, Field Orientation, Forest Management and Planning, Soils Analysis, Silviculture, Forest Mensuration and Surveys & Assessments, Ecosystem Classification courses. Students will investigate red pine thinning trials, plant trees and assess planter performance, prepare for the white pine tree marking certification course. The use of brush saws and ATV's will be demonstrated and practiced by each student. In addition, students will visit various research sites dealing with jack pine productivity.

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

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

1. Navigate accurately and quickly through a forested landscape using mechanical and electronic navigation aids.

Potential Elements of the Performance:

- Properly use a magnetic hand compass with declination set
- Properly use a GPS unit to locate field positions, mark locations and enter field coordinates
- Obtain directions from maps and aerial photographs using a navigational protractor and/or a compass.

2. Compare the effects of thinning a plantation at various spacing factors.

Potential Elements of the Performance:

- Measure tree numbers, heights and diameters.
- Establish plots of a designated size and calculate # of trees/ha and volume of trees/ha

3. Complete a description of a soil pit.

Potential Elements of the Performance:

- Establish a soil pit to the proper depth and dimension.
- Complete an analysis of soil horizons, both organic and mineral.
- Perform measurements and a texture test on all mineral horizons.
- Take a bulk density sample of the mineral soil.

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- Establish the presence of free carbonates in the soil profile.
  - Complete tally sheets satisfactorily and collect a soil sample from each of the soil horizons.
  - Identify the color of each mineral soil horizon using the Munsell color charts.
4. Operate an All Terrain Vehicle in a safe efficient manner in an operational forest setting.

Potential Elements of the Performance

- Describe all the major mechanical features of the ATV machine
  - Demonstrate knowledge of all the operational features of the ATV
  - List and demonstrate the use of all ATV safety equipment
  - Demonstrate the safe operation of the ATV in the forest
5. Operate a brush saw for the purpose of removing unwanted, competing vegetation and/or the thinning of a plantation.

Potential Elements of the Performance:

- Be able to identify the parts of a brush saw.
  - Perform a routine check relating to the operability of a brush saw.
  - Operate a brush saw within the proper safety guidelines
  - Understand the concept of directional felling of brush/trees.
  - Change, sharpen and maintain the cutting blade.
6. Carry out operational silvicultural activities.

Potential Elements of the Performance:

- Plant forest tree seedlings according to specified standards.
  - Assess tree planting according to a specified format.
  - Calculate payment of a tree plant operation.
  - Accurately mark white pine trees for removal and understand the underlying principles when selecting trees to be harvested.
  - Identify and access defects and wildlife values in tolerant hardwood stands.
  - Be familiar with the various methods of site preparation and the impacts of future forest crops.
  - Inspect and assess forest road water crossings.
7. Be able to follow instructions and work as part of a cooperative, productive team in the forest.

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Code No.Potential Elements of the Performance:

- Demonstrate ability to organize and complete work in an efficient and timely manner.
- Demonstrate the ability to work as part of a team.
- Conduct all work in a manner that respects the safety of other crew members.
- Wear all safety equipment (hardhat, safety boots) as required.
- Recognize potential hazards while working in the forest and the steps that can be taken to minimize risks to crew members

**III. TOPICS:**

1. Assessing a red pine thinning trial
2. Tree planting
3. Tolerant hardwood defects and wildlife values
4. White pine tree marking
5. Brush sawing and ATV operation
6. Describing soils by establishing soil pits
7. Tour of jack pine productivity study (scarification alternatives)
8. Tree planting assessment
9. Ecology and identification of wetland plants and bryophytes
10. Inspect water crossings
11. Tree measurements

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

- Fall Camp 2<sup>nd</sup> Yr Forestry NRT 252 course manual
- Forest Soils (NRT219) course manual & lab manual
- Field Manual for describing soils in Ontario
- Wetland plants of Ontario text
- Forest plants of Central Ontario text
- Ontario Tree Marking Guide text
- Compass
- Pocket Stereoscopes
- Clipboard
- Pencils/pen/paper
- Calculator
- Hardhat
- Safety boots (2 pair recommended – rubber and leather)
- Rain gear, small day pack
- Sleeping bag, pillow
- Extra clothing and personal items
- Pocket knife, flashlight, canteen (water bottle)
- Wrist watch
- Cup or coffee mug
- Prescription medicine if required

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

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%	4.00
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.	

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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.

Students must satisfactorily complete **ALL** of the following activities; Bob Currell's exercise, white pine tree marking exercise and test, tree planting, participate in the use of a brush saw, soils pit description, aquatic plant identification, water crossing inspection and GPS contest and moss identification in order to obtain a satisfactory (S) grade in this course.

#### **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.

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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, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>.

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Code No.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 *November* 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.

According to official policy “students are NOT permitted to drive other students to travel destinations”. Student vehicles are not permitted at field camp.