

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**SAULT  
COLLEGE**

**COURSE OUTLINE**

**COURSE TITLE:** Surveys and Assessments

**CODE NO. :** NRT 202 **SEMESTER:** 3

**PROGRAM:** Forest Conservation Technician

**AUTHOR:** Bob Currell

**DATE:** Sept.2011 **PREVIOUS OUTLINE DATED:** June 2010

**APPROVED:** "B.Punch"

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**CHAIR** **DATE**

**TOTAL CREDITS:** 4

**PREREQUISITE(S):** None

**HOURS/WEEK:** 3

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**I. COURSE DESCRIPTION:**

Surveys and Assessments play an important role in monitoring the status of forest resources as well as evaluating the success of silvicultural projects. The procedures for carrying out many types of commonly used forestry surveys and assessments will be explained in this course. Many of the surveys explained indoors will then be carried out under field conditions to demonstrate their practical application.

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

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

1. Explain why accurate forest surveys are critically important to the practice of Sustainable Forestry in Ontario

Potential Elements of the Performance:

- outline legislation
- describe responsibilities for Compliance Monitoring and Silviculture Effectiveness Monitoring in forest management and outline the process involved in its implementation
- describe basic statistical concepts important when designing, carrying out and evaluating data collected in forest surveys and assessments

This learning outcome will represent 15% of the course grade.

2. Carry out forest surveys to evaluate the quality of silvicultural treatments

Potential Elements of the Performance

- Evaluate tree planting quality using planting quality surveys
- Be able to identify planting quality faults
- Lay out a tree plant-sampling pattern to evaluate planting quality
- Calculate payment rates to contractors based on planting quality
- Carry out a plantation thinning survey to evaluate the need for a thinning treatment

This learning outcome will represent 20% of the course grade.

3. Determine how successfully an area is regenerating to suitable tree Species (Silviculture Effectiveness Monitoring)

Potential Elements of the Performance:

- describe the features of a regeneration survey and a Free to Grow survey
- carry out and compile a regeneration survey using Well-spaced Free-growing Regeneration Assessment procedures

This learning outcome will represent 15% of the course grade.

4. Explain how to minimize site disturbance on sensitive sites in the Great Lakes St. Lawrence (GLSL) forest region.

Potential Elements of the Performance:

- describe the characteristics of six main types of sensitive sites in the GLSL.
- describe legislation, procedures and guidelines that apply to the protection of sensitive sites
- recognise signs of the 5 main types of site disturbance in the GLSL region
- explain the factors which affect the sensitivity of sites
- explain strategies, techniques and equipment which can be used to minimize and mitigate site disturbance
- assess the level of site damage on an area of recently harvested forest

This learning outcome will represent 20% of the course grade.

5. Complete a Pre-harvest Silvicultural Prescription to evaluate the characteristics of any area and to recommend ways it should be harvested and regenerated

Potential Elements of the Performance:

For an area which you have been assigned:

- complete a site evaluation
- complete a harvesting plan
- prepare a forest renewal prescription

This learning outcome will represent 15% of the course grade.

6. Carry out inventories of forest lands to the standards of accuracy required for a variety of natural resource research projects

Potential Elements of the Performance:

- describe a Ontario Living Legacy project (NEBIE) to survey lands managed under a range of intensities
- re-measure permanent sample plots, established to evaluate forest growth

This learning outcome will represent 15% of the course grade.

### **III. Topics:**

1. Introduction to monitoring, survey and assessment statistics
2. Plantation thinning surveys
3. Silviculture effectiveness monitoring
4. Compliance monitoring
5. Evaluating site disturbance
6. Pre-Harvest Silvicultural Prescriptions
7. Tree Planting quality assessments
8. The NEBIE project

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

Assignments

- surveys carried out in the field 35%
- lab assignments and quizzes 15%

Tests (2)

50%

The following semester grades will be assigned to students:

<b>Grade</b>	<b>Definition</b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	
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.	
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, 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>.

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.

A province wide site disturbance training program has been developed by the OMNR in conjunction with Forest Industries in Ontario to develop the knowledge and skills needed by forest planners, operators and compliance staff in a consistent way province wide. Your professor is certified to teach, evaluate and certify students who demonstrate sufficient knowledge of the material. Forest Practice Competency Partnership site disturbance training participation certificates, issued by the OMNR, will be given to students who pass this segment of the course.

Several field exercises will be carried out in this course, representing a majority of assignment marks. You will be informed, in class, one week ahead of time when field work is scheduled and are expected to attend. You will receive a 0 grade for any assignment associated with a field trip which you miss.

