

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

| | | | |
|-------------------------|---------------------------------|--------------------------------|-------------|
| COURSE TITLE: | Arboriculture Science 1 | | |
| CODE NO. : | ARB 605 | SEMESTER: | 1 |
| PROGRAM: | Utility Arborist Apprenticeship | | |
| AUTHOR: | John Clement | | |
| DATE: | Nov 2011 | PREVIOUS OUTLINE DATED: | New |
| APPROVED: | "B.Punch" | | Nov 2011 |
| | Chair | | DATE |
| TOTAL CREDITS: | 1 | | |
| PREREQUISITE(S): | None | | |
| HOURS/WEEK: | 15 hours | | |

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For additional information, please contact Brian Punch, Chair
School of Technology, Skilled Trades & Natural Resources
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I. PHILOSOPHY/GOALS:

This course will provide the student with the skills, tools and knowledge necessary to Identify various woody plant parts, growth factors, compartmentalization of decay, diseases, disorders and pathology that could be harmful to the integrity of the electrical system, evaluate the condition of anchor points used in fall protection, and evaluate work operations within environmentally sensitive areas.

II. STUDENT LEARNING OUTCOMES

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

- 1) Identify and describe the structure, functions and interrelationship of the main organs of plants.

Potential Elements of the performance.

- Describe the structures of leaves, branches, the plant vascular system, roots, flowers, fruiting structures, and seeds.
- Explain the plant as a system.
- State the interrelationship of plant parts.

- 2) Describe plant growth and all affecting factors, including environmental conditions, soil, and plant competition.

Potential Elements of the Performance:

- Discuss the effects of temperature, water availability, spatial distribution, wind, pollution, sunlight, topography, soil texture, drainage, and soil science on tree growth.
- Prepare and present a one-page report that explains these effects.

- 3) Describe the compartmentalization of decay in trees.

Potential Elements of the performance:

- Review the creation of wall 1-4 within a tree.
- Explain the protection of branch tissue through proper pruning.
- Describe the effects of poor pruning techniques on CODIT.

- 4) Identify the physical condition and soundness of interim, and final anchor points based on tree size, tree condition and species.

Potential Elements of the Performance:

- Describe attributes of a solid anchor point
- Explain the impacts of various loads on tree structure when selecting an interim and final anchor point.

III. POTENTIAL TOPICS TO BE COVERED:

Plant structure and function.
 Factors affecting Plant growth.
 Compartmentalization of Decay in Trees (CODIT).
 Interim and Final Anchor Points.

IV. REQUIRED STUDENT RESOURCES

None.

V. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS, ETC.)

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|------------------------------|-----|
| Attendance and Participation | 25% |
| Quizzes and Assignments | 50% |
| Final Test | 25% |

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

| <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 less | 0 |
| CR (Credit) | Credit for diploma requirements has been awarded. | |
| S | Satisfactory achievement in field placement or non-graded subject areas. | |
| U | Unsatisfactory achievement in field placement or non-graded subject areas. | |
| X | A temporary grade – limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see Policies & Procedures Manual – Deferred Grades and Make-up). | |

NR Grade not reported to Registrar's office.
This is used to facilitate transcript
preparation when, for extenuating
circumstances, it has been impossible
for the faculty member to report grades.

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 will not be granted admission to the room.*

VI. COURSE OUTLINE ADDENDUM:

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