

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Horticulture and Grounds Keeper


CODE NO. : NRT 145 **SEMESTER:** 2


PROGRAM: Parks Operations, Adventure Recreation and Parks

AUTHOR: Bob Knudsen

DATE: Jan. 2011 **PREVIOUS OUTLINE DATED:** Jan. 2010

APPROVED:


CHAIR


DATE

TOTAL CREDITS: 3

PREREQUISITE(S): None

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

This practical course will provide the student with a general understanding of horticulture and groundskeeping principles and procedures that are to be carried out over the course of a year, with both private and commercial application considered.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Beginning with the basics of soil sciences.

Potential Elements of the Performance:

- Essential elements for plant growth
- Soil structures
- How plants feed and utilize soil nutrients
- pH and its relationship with essential nutrients and basic plant functions
- Some microorganisms and their relationship and functions in soils that influence plant health and growth
- Composting and nitrogen fixing bacteria
- The carbon to nitrogen ratio

This learning outcome will constitute approximately 20% of the course's grade

2. Study of the practical use of fertilizers.

Potential Elements of the Performance:

- What do fertilizer guaranteed analyses mean
- When to use each type of fertilizer and which fertilizer
- Organic versus chemical fertilizers
- Soilless mixtures versus soil mixtures as growing mediums
- Grow your own seedlings

This learning outcome will constitute approximately 10% of the course's grade

3. **Horticulture Plant Identification**

Potential Elements of the Performance:

- Learning ten annual bedding plants
- Learning ten species of perennial plants
- Learning ten shrub species
- Learning ten tree species
- Selecting exotic non-invasive horticultural species and protecting the environment

This learning outcome will constitute approximately 20% of the course's grade

4. **Turf Management**

Potential Elements of the Performance:

- Different types of turf (grass species) and uses
- Fertilizers and pesticide use in turf management
- Tools, machinery and their uses
- Site preparation for seeding and sodding

This learning outcome will constitute approximately 10% of the course's grade

5 **Aesthetic Landscaping and Propagation**

Potential Elements of the Performance:

- Design a landscape plan for a Provincial Park gatehouse
- Visits to local greenhouses both commercial and municipal
- Grow edible seed plants
- Propagate plants from cuttings

This learning outcome will constitute approximately 10% of the course's grade

III. TOPICS:

1. Soil Sciences
2. Soils and Fertilizers
3. Plant Identification
4. Turf Management
5. Aesthetic Landscaping
6. Propagation

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Seed Catalogues e.g. Vesey's Seeds, Ontario Seed Company

Tree and Shrub Catalogues e.g., Brookdale Treeland Nurseries

Internet Resources

V. Additional Resources

Donahue, Roy L., Shickluna, John C., Robertson, Lynn S. 1971. SOILS An Introduction to Soils and Plant Growth. Prentice-Hall Inc., New Jersey.

Tucker, P.J., 1996. Pruning Ornamentals. Queen's Printer for Ontario, Toronto, Canada

VI. EVALUATION PROCESS/GRADING SYSTEM:

<give breakdown of tests/assignments and their weights relative to calculating the final grade for the course>

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<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:

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.

VII. COURSE OUTLINE ADDENDUM:

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

