SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

COURSE TITLE:	Horticulture and Grounds Keeper		
CODE NO. : MODIFIED CODE:	NRT145 SEMESTER: NRT0145	Winter	
PROGRAM:	Parks Operations, Adventure Recreation and Parks		
AUTHOR: MODIFIED BY:	Bob Knudsen Velma Simon, Learning Specialist CICE Program		
DATE:	Jan. 2011 PREVIOUS OUTLINE DATED:	Jan. 2010	
APPROVED:	"Angelique Lemay"	Feb. 2011	
	CHAIR, COMMUNITY SERVICES	DATE	
	0		
TOTAL CREDITS:	3		
TOTAL CREDITS: PREREQUISITE(S):	3 None		

I. COURSE DESCRIPTION:

This practical course will provide the student with a general understanding of horticulture and grounds keeping 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 CICE student with the assistance of a Learning Specialist, 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

Horticulture and Grounds Keeper

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. <u>TOPICS:</u>

- 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:

awarded.

<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	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
А	80 - 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been	

S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded
	subject area.
Х	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.
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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.

CICE Modifications:

Preparation and Participation

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.