COURSE OUTLINE: NRT145 - HORTIC/GROUNDSKEEPER

Prepared: Elisa Muto
Approved: Bob Chapman - Dean

Course Code: Title	NRT145: HORTICULTURE GROUNDSKEEPER
Program Number: Name	5212: ADVENTURE RECREATION
Department:	NATURAL RESOURCES PRG
Academic Year:	2025-2026
Course Description:	Students will receive training in the care and maintenance of grasses, flowers, trees, shrubs and invasive plants associated with managed and manicured landscapes. Practical experience with appropriate equipment in mowing, trimming, watering, planting and transplanting, pest management and pruning will be emphasized.
Total Credits:	3
Hours/Week:	3
Total Hours:	42
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**5212 - ADVENTURE RECREATION** VLO 2 Identify, discuss, organize and assess common Flora & Fauna species found throughout ON, including biological and physiological characteristics. VLO 8 Demonstrate an understanding of sustainable development and apply the foundations in the natural environment.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources. EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences.

SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

Course Evaluation:	Passing Grade: 50%, D
	A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	Academic success is directly linked to attendance. Missing more than 1/3 of the course hours in a semester shall result in a F Grade for this Course.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Beginning with the basics of soil sciences	1.1 Learn the essential elements for plant growth 1.2 Understand soil structures 1.3 Describe how plants feed and utilize soil nutrients 1.4 pH and its relationship with essential nutrients and basic plant functions 1.5 Some microorganisms and their relationship and functions in soils that influence plant health and growth 1.6 Composting and the carbon to nitrogen ratio
Course Outcome 2	**Learning Objectives for Course Outcome 2**
2. Study of the practical use of fertilizers and the environment	2.1 Understand the meaning of fertilizer guaranteed analysis 2.2 Understand which fertilizer to use and when 2.3 Differentiate between organic and chemical fertilizers 2.4 Differentiate between soil-less mixtures and soil mixtures as growing mediums 2.5 Grow your own geranium cuttings 2.6 Grow your own seedlings
Course Outcome 3	**Learning Objectives for Course Outcome 3**
3. Basic Plant Anatomy and Development	3.1 Differentiate between angiosperms and gymnosperms 3.2 Know the basic components of plant cells and their functions 3.3 Recognize the various cells and tissues that make up plant leaves, stems and roots 3.4 Describe the functional roles of the major plant organs (stems, leaves and roots) 3.5 Describe the basic life cycles of plants (angiosperms and gymnosperms) and patterns of development (primary and secondary growth).
Course Outcome 4	**Learning Objectives for Course Outcome 4**
4. Horticulture Plant Identification	4.1 Learn ten annual bedding plants 4.2 Learn ten species of perennial plants 4.3 Learn ten shrub species 4.4 Learn ten tree species 4.5 Describe sustainable landscape strategies 4.6 Select native and exotic non-invasive horticultural species
Course Outcome 5	**Learning Objectives for Course Outcome 5**
5. Turf Management	5.1 Describe different types of turf (grass species) and their requirements 5.2 Describe how fertilizers are used in turf management

		5.3 Describe tools, machinery and how they are used in turf management 5.4 Site preparation for seeding and sodding
	Course Outcome 6	**Learning Objectives for Course Outcome 6**
	6. Aesthetic Landscaping and Propagation	6.1 Design a landscape plan for a residential property 6.2 Visit local greenhouses 6.3 Grow edible seed plants 6.4 Propagate plants from cuttings

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments	30%
Labs	20%
Quizzes	40%
Tests	10%

Date: December 2, 2025

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.