SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: Urban Forestry

CODE NO. :   **NRT 244**   **SEMESTER:**   4

PROGRAM: **Forest Conservation Technician**

AUTHOR: M. Baker

DATE: Nov 2013   **PREVIOUS OUTLINE DATED:**   none

APPROVED: "C.Kirkwood"   Jan'14
                          _____   _____
                                          DEAN   DATE

TOTAL CREDITS: 3

PREREQUISITE(S):   NONE

HOURS/WEEK: 3

I.   COURSE DESCRIPTION:

The focus of this course is on the care, health and protection of municipal trees, forests and green spaces. Students will be versed in arboriculture practices and techniques, tree inventories and appraisals and as well have an understanding of the planning, policies, programs, by-laws and public education required to maintain urban trees.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. **Describe what urban forestry means and what the benefits and values are to maintaining a healthy forest within the urban environment.**

   Elements to be covered:

   - the urban forest – concept and definition
   - environmental benefits – improved air quality, reduced noise pollution, improved water quality, reduced wind and soil erosion, wildlife diversity, reducing climate change effects
   - economical benefits – favorable first impression, economic stability, attractive districts, occupancy rates and property values
   - energy benefits – provision of shade, reduced glare
   - health benefits – feeling of relaxation, green and recreational spaces, walking trails and parks

2. **Identify the elements required to start and maintain a successful urban forestry program.**

   Elements to be covered:

   - developing a program and standards
   - establishing a tree board or committee
   - adopting a tree/landscape ordinance
   - developing a program budget
   - staffing a program
   - developing a management plan/inventory
   - public outreach

3. **Describe the urban forest environment and how it differs to the environment provided by a natural forest.**

    Elements to be covered:

    - competing values – new construction, presence of utilities, human desire
    - densities and space
    - light availability
    - wind effects

4. **Describe the biology of an urban forest and how it differs to the biology of a natural forest.**

    Elements to be covered:

    - soil quality and compaction
    - air quality
    - water quality and availability
    - invasive species
    - exotic or non-natural species
    - other pests

5. **Manage the urban forest**

    Elements to be covered:

    - executing the urban forestry program
    - tree and landscape ordinance
    - coping with environmental and biological challenges
    - planting/ maintaining/removing trees or other vegetation
    - use of pesticides
    - tree nutrition and fertilization
    - selecting the right tree
    - tree inventory and analysis, long term planning
    - risk management

6. **Describe accepted arboricultural practices and their application in the execution of a successful urban forestry program**

    Elements to be covered:

    - arborist practices – focus on planting, trimming/pruning, tree removal and pesticide applications
    - arborist hand tools and equipment

- health and safety, environment and public safety
- overhead and underground utilities
- working at heights
- other workplace hazards

III.   TOPICS:

1.   Urban forest value
2.   Urban forest environment
3.   Urban forest biology
4.   Management programs
5.   Arboriculture – theory and practices/health and safety

IV.   REQUIRED RESOURCES/ TEXTS/ MATERIALS:

ISA – Arborists' Certification Study Guide

V.   EVALUATION PROCESS/GRADING SYSTEM:

MAJOR ASSIGNMENTS AND TESTING

Exam	30%
Assignments / Tests / Quizzes	40%
Tree inventory and analysis	15%
Arboriculture assessment	15%
TOTAL	**100%**

Late Assignments:

Ten percent (%) will be deducted from the total value of the assignment for every day late.

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
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.

Cell phone use:
Cell phone use in class will not be permitted unless in case of an emergency.

VII.   COURSE OUTLINE ADDENDUM:

None