

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



**SAULT
COLLEGE**

COURSE OUTLINE


COURSE TITLE: 1ST YEAR FALL FIELD CAMP

CODE NO. : NRT131 **SEMESTER:** 1

PROGRAMS: FOREST CONSERVATION, ADVENTURE RECREATION AND PARKS,
FISH & WILDLIFE CONSERVATION, NATURAL ENVIRONMENT
TECHNICIAN / TECHNOLOGY

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DATE: June 2012 **PREVIOUS OUTLINE DATED:** July 2011

APPROVED:  **June 2012**

CHAIR **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S): NONE

**LENGTH OF
COURSE:** 4 CONSECUTIVE DAYS

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**For additional information, please contact Brian Punch,
Chair of Environment/Design/Business
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I. COURSE DESCRIPTION:

Fall Field Camp introduces a variety of field skills essential to field technicians. This course consists of 4 consecutive days in a wilderness setting. Students will be exposed to a bush camp experience where they will be prepared to safely work and live. Students will pitch their own tents, gather firewood and perform duties related to a bush camp operation.

In addition, there are a series of 6 field exercises that all students will participate in. Navigating with compass, satellite imagery and topographic maps are practiced as are pacing and chaining through wilderness areas. Instruments used in forest measurements will be demonstrated and students will conduct a survey of a forested area. Students will be introduced to the use and safe operation of firefighting equipment such as fire pumps with intakes and hoses and back pack pumps. Students will conduct a stream assessment by investigating chemical, physical and biological parameters. In addition, students will use a variety of methods to collect terrestrial insects as well as categorize specimens.

There will be evening sessions relating to tree and shrub identification, fire building & water boil and outdoor cooking. In order to earn credit, students are required to actively participate in all activities in a safe and satisfactory manner.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

- 1. Use a magnetic hand compass and navigate to within 5% accuracy of the destination.**

Potential Elements of the Performance:

- identify the parts of a compass
- understand and set magnetic declination on a compass
- be able to use flagging tape in order to travel in a straight line

- 2. Pace to within 5% accuracy and measure distances using a 50 m rope to within 0.5% accuracy.**

Potential Elements of the Performance:

- determine pacing factor and be able to pace distances
- understand the measurement divisions for a 50 m rope
- be able to maintain and properly store equipment
- complete a closed traverse using a compass and 50 meter rope to a specified accuracy; determine area, calculate percent error compared to a GPS traverse

- 3. Use satellite imagery as well as an OBM map to travel from one location to another using a magnetic hand compass.**

Potential Elements of the Performance:

- understand scales of photographs and maps
- identify major topographical and cover type features on maps and imagery
- be able to measure distances and directions on maps and imagery

- 4. Identify native trees and shrubs from foliage or cone characteristics**

Potential Elements of the Performance:

- collect cones and foliage from coniferous trees
- name the native using approved botanical names

- 5. Safely use firefighting equipment including fire pumps, back pack pumps and fire hose.**

Potential Elements of the Performance:

- demonstrate safe use and operation of water pumps and hose used in forest fire fighting operations
- correctly roll fire hose
- become proficient in the use of a soft backpack pump

- 6. Collect and categorize terrestrial insects**

Potential Elements of the Performance:

- demonstrate effective use of a variety of methods for the collection of terrestrial insects
- accurately document & categorize insect specimens

8. Conduct a stream assessment

Potential Elements of the Performance:

- accurately assess chemical and physical parameters of a stream including dissolved oxygen, pH, alkalinity, carbon dioxide, total dissolved solids and turbidity
- use proper techniques to collect and examine aquatic invertebrates using dip nets and surber samplers
- calculate a diversity index for the site using aquatic invertebrates
- complete field forms neatly and accurately

9. Conduct a forest inventory survey

Potential Elements of the Performance:

- complete a dot tally and record legible field notes
- measure and record tree diameters using callipers and diameter tapes
- measure tree heights using clinometers
- measure the age of trees with an increment corer and count growth rings

10. Operate a canoe using appropriate canoe strokes to navigate a water course to a specified destination

Potential Elements of the Performance:

- in cooperation with canoeing partner, execute a draw, sweep, pry or bow stroke where appropriate and travel to destination
- apply map scale to estimate distances traveled

11. Safely live and work in a bush camp

Potential Elements of the Performance:

- properly set up a 2-man tent
- demonstrate proper use of sleeping bags and sleeping pads
- store food, set up and operate a bush camp to minimize the potential for bear-human conflict
- use proper hygiene in the bush
- safely collect and burn firewood
- demonstrate safe use of portable generators, tent heaters and electrical lighting
- perform a circle check on a van or motorized vehicle
- maintain a positive outlook and be respectful towards others
- demonstrate the importance of safety, attitude and teamwork when working and living in the bush
- demonstrate a respectful attitude towards the environment

III TOPICS:

1. Navigation & compassing for accuracy on land and water
2. Chaining, pacing and traversing through the forest
3. Identification of trees & shrubs
4. Safe use of fire equipment
5. Collection & categorization of terrestrial insects
6. Stream assessment
7. Forest inventory survey
8. Importance of safety and attitude in the bush

IV. REQUIRED RESOURCES/ TEXTS/ MATERIALS:

1. Farrar, J.L. 1995. **Trees in Canada**. Fitzhenry & Whiteside. Markham, Ontario. 502 pp.
2. Hard hat, safety boots, reflective vest.

A list of additional supplies, equipment, maps and field forms will be available as handouts and/or on LMS to participants

V. EVALUATION PROCESS/GRADING SYSTEM:

The grade received will be based on attendance and participation. **MANDATORY** attendance and participation is required for all field activities for a satisfactory (S) grade.

The following semester grades will be assigned to students:

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:

NO ALCOHOL, ILLEGAL DRUGS or FIREARMS ALLOWED IN CAMP

Those students not complying with the Student Code of Conduct will be withdrawn from camp and receive an F grade.

Personal Vehicles

Transportation to and from field camp is provided. Students will not normally be allowed to use personal vehicles. Use of personal vehicles requires the prior written permission of a college faculty member and keys must be surrendered upon arrival at camp.

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

Safety

Students are expected to follow all safety-related rules and procedures at all times. Safety equipment such as safety boots, hard hats and reflective vests must be worn on all exercises. Students must not be in possession of alcohol, drugs or firearms. Students must not participate in any exercise or activity that they believe to be unsafe.

VII. COURSE OUTLINE ADDENDUM:

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