

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**COURSE OUTLINE**

**COURSE TITLE:** Fall Field Exercises

**CODE NO. :** NET305 **SEMESTER:** 5

**PROGRAM:** Natural Environment Technologist - Conservation and Management

**AUTHOR:** Gerard Lavoie & Robert Knudsen

**DATE:** September 2016 **PREVIOUS OUTLINE DATED:** Sept. 2015

**APPROVED:**

	<b>Colin Kirkwood</b>	Sept. 2016
	_____ CHAIR	_____ DATE

**TOTAL CREDITS:** 2

**PREREQUISITE(S):** N/A

**HOURS/WEEK:** 1 week

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**For additional information, please contact Brian Punch, Chair, Environment and Design  
School of Technology and Natural Resources  
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**I. COURSE DESCRIPTION:** This week long trip exposes students to a variety of industrial sites and scientific venues which may include some of the following:

- Elliot Lake Mining museum.
- Stanrock & Denison Uranium mine reclamation sites.
- Science North & Dynamic Earth.
- Laurentian University: Living with Lakes Centre.
- Vale – Smelting and refining operations; greening sites.
- Xstrata – Smelter operations & potential for underground visit.
- Manitoulin Island - Misery Bay & Burnt Island site visitations.
- Wildlife overpasses Presentation.

The class will be divided into groups, each having a responsibility for preparing one class meal while camping out. Groups are encouraged to coordinate efforts and plan their time effectively. All tours and Site visitations require personal protective equipment.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

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

1. **Gain and understanding of industrial site reclamation processes**  
Potential Elements of the Performance:

- Exposure to a decommissioned uranium reclamation site.
- Understand concepts of Land Stewardship.
- Display knowledge of Uranium mining history in Northern Ontario.

2. **Organize and conduct field surveys according to accepted protocols.**

Potential Elements of the Performance:

- Identify common forest floor plants as they relate to Ecosite Land Classification.
- Gain an understanding of ELC Field calibration plot protocol.
- Measure and record forest inventory data.
- Extract and correctly key out soil down to texture family and type.
- Familiarity with soil depth, moisture, chemistry, and texture families.

3. **Gain exposure to sustainable initiatives on industrial sites**

Potential Elements of the Performance:

- Learn how byproduct & waste power generation work.
- Understand green initiatives at work within industrial sites.
- Exposure to reclamation and sustainable extraction processes.

**4. Perform in a group environment.**Potential Elements of the Performance:

- Show ability to cooperate, work effectively with others.
- Carry out field surveys and summarize results.
- Be on time and 'ready to go' before scheduled departure times
- Act courteously and respect the rights of others throughout the four day trip.
- Abide by all safety procedures and policies for every tour and visitation.

**5. Pack effectively and use personal camping equipment.**Potential Elements of the Performance:

- Pack clothes, sleeping bag, tent and food for a four day period with one site move.
- Meal preparation for four days in a remote setting each group responsible for one group supper.
- Erect and sleep in a tent over a four day period in a remote setting.

**III. TOPICS:**

1. Industrial Site reclamation
2. Resource based land and water stewardship
3. Pollution control
4. Waste reduction
5. Field Keys to Ecosites of Ontario
6. Field Calibration Plot Design
7. Field Sampling Protocol
8. Mineral Substrate Texture Classes
9. Forest Plant Communities and Indicator Species
10. Invasive & Endangered Species

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

- a) Clipboard - Pencils & Pens.
- b) Silva Ranger or Suunto MC-1 compass.
- c) Forest inventory equipment package.
- d) Steel-toed boots & Personal Protective Equipment.
- e) Field guides & ELC Yellow click binder.
- f) Camping Equipment (list provided).

**V. EVALUATION PROCESS/GRADING SYSTEM:**

The following semester grades will be assigned to students:

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

**VI. SPECIAL NOTES:**Grading

An **S** or **U** grade will be assigned based on whether the learning objectives and elements of the performance have been met. An evaluation sheet will be completed during and after the trip which will list each of the twelve (12) Elements of Performance. Each performance element will be graded as having been completed in a Satisfactory or Unsatisfactory manner. **U** grades in more than 2 of the Elements of Performance will result in a **U** grade for the course.

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.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office.

**VII. COURSE OUTLINE ADDENDUM:**

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