# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

## SAULT STE. MARIE, ONTARIO



## **COURSE OUTLINE**

COURSETITLE: SURVEYING FIELD CAMP

CODE NO.: SUR122 SEMESTER: TWO

PROGRAM: CIVIL ENGINEERING TECHNICIAN

AUTHOR: SALIENCO

**DATE**: JANUARY **PREVIOUS OUTLINE DATED**: JAN

2014

2013

APPROVED: "Corey Meunier"

CHAIR DATE

TOTAL CREDITS: TWO

PREREQUISITE(S): NONE

HOURS/WEEK: 35

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School of Technology & Skilled Trades

(705) 759-2554, Ext.2610

#### I. COURSE DESCRIPTION:

The purpose of this field camp is to give you a good grounding into layout surveying principles at a basic entry level. The importance of learning basic layout principles is to better prepare you for an entry level position as a layout surveyor. This summer, you may find yourself working for construction/engineering/surveying firms whose expectation is that you can handle basic layout tasks.

## II. LEARNING OUTCOME:

- 1. Use survey instruments to collect and provide data for engineering/construction projects.
- 2. Adhere to applicable health and safety related legislation and practices.
- 3. Demonstrate relevant mathematical, computer and technical problem solving skills as it relates to civil engineering / construction projects

#### VI. TOPIC OUTLINE

Outcome	Topic and Content	Reading	Day
1,2,3	Introduction to Field Camp	Handouts Chapter 2	1
	<ul> <li>Select group members</li> <li>Overview of field camp activities</li> <li>Components of good team work</li> <li>Proper care of equipment</li> <li>Perform a peg test</li> <li>Run a level exercise</li> <li>Total station set up and operations</li> <li>Plan activities for tomorrow</li> </ul>		
1,2,3	<ul> <li>Layout</li> <li>Review layout procedures</li> <li>Complete a list of required layout materials</li> <li>.Determine layout points from AutoCAD drawing</li> <li>Lay out stakes for each corner of the property, building, parking lot and centerline of curve</li> <li>Plan activities for tomorrow</li> </ul>	Handouts Chapter 12, 13 & 14 Selections	2

1,2,3	Setting Grades	Handouts	3
	<ul> <li>Review procedures for setting grades</li> <li>Set grades for corners of building</li> <li>Set grades for parking lot and catch basin</li> <li>Batter board construction</li> <li>Plan activities for tomorrow</li> </ul>		
1,2,3	<ul> <li>Checking Work</li> <li>Overview of importance of checking your work</li> <li>Check layout</li> <li>Make appropriate corrections if necessary</li> <li>Prepare group presentations</li> <li>Plan activities for tomorrow</li> </ul>	Handouts Chapter 12, 13 & 14 Selections	4
1,2,3	<ul> <li>Wrap Up</li> <li>Make class presentations</li> <li>Demonstration of GPS</li> <li>Evaluations</li> <li>Looking forward to next course</li> </ul>	Handouts	5

## III. REQUIRED RESOURCES/TEXTS/MATERIALS:

• <u>Surveying with Construction Applications</u> Barry F. Kavanagh

## IV. EVALUATION PROCESS/GRADING SYSTEM:

You will be assigned a final grade based on successful completion of your field camp.

TOTAL	100%
Field Book	<u>30%</u>
Presentation	20%
Accuracy	30%
Attendance	20%

## The following semester grades will be assigned::

The fellenning competer grades will be accignical.						
		Grade Point				
<u>Grade</u>	<u>Definition</u>	<u>Equivalent</u>				
A+	90 - 100%	4.00				
Α	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					
	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.

#### VII. COURSE OUTLINE ADDENDUM:

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