

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**SAULT  
COLLEGE**

**COURSE OUTLINE**

<b>COURSE TITLE:</b>	SURVEYING FIELD CAMP		
<b>CODE NO. :</b>	SUR122	<b>SEMESTER:</b>	TWO
<b>PROGRAM:</b>	CIVIL ENGINEERING TECHNICIAN		
<b>AUTHOR:</b>	SAL IENCO		
<b>DATE:</b>	January 2017	<b>PREVIOUS OUTLINE DATED:</b>	January 2016
<b>APPROVED:</b>	<i>“Corey Meunier”</i>		Dec 2016
	<b>CHAIR</b>	<b>DATE</b>	
<b>TOTAL CREDITS:</b>	TWO		
<b>PREREQUISITE(S):</b>	NONE		
<b>HOURS/WEEK:</b>	35		

**Copyright ©2017 The Sault College of Applied Arts & Technology**  
*Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.*  
*For additional information, please contact C. Meunier, Chair*  
*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	<ul style="list-style-type: none"> <li>• <b>Introduction to Field Camp</b> <ul style="list-style-type: none"> <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> </li> </ul>	Handouts Chapter 2	1
1,2,3	<ul style="list-style-type: none"> <li>• <b>Layout</b> <ul style="list-style-type: none"> <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> </li> </ul>	Handouts Chapter 12, 13 & 14 Selections	2

1,2,3	<ul style="list-style-type: none"> <li>• <b>Setting Grades</b> <ul style="list-style-type: none"> <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> </li> </ul>	<i>Handouts</i>	3
1,2,3	<ul style="list-style-type: none"> <li>• <b>Checking Work</b> <ul style="list-style-type: none"> <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> </li> </ul>	<i>Handouts</i> Chapter 12, 13 & 14 Selections	4
1,2,3	<ul style="list-style-type: none"> <li>• <b>Wrap Up</b> <ul style="list-style-type: none"> <li>• Make class presentations</li> <li>• Demonstration of GPS</li> <li>• Evaluations</li> <li>• Looking forward to next course</li> </ul> </li> </ul>	<i>Handouts</i>	5

### III. REQUIRED RESOURCES/TEXTS/MATERIALS:

- Surveying with Construction Applications  
Barry F. Kavanagh

### IV. EVALUATION PROCESS/GRADING SYSTEM:

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

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

**The following semester grades will be assigned::**

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	4.00
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.	

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

**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.