

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



**SAULT  
COLLEGE**

**COURSE OUTLINE**

**COURSE TITLE:** Prints 2

**CODE NO. :** ELR725                      **SEMESTER:** Intermediate Level

**PROGRAM:** Construction and Maintenance Electrician  
Apprenticeship

**AUTHOR:** S. Hager

**DATE:** October              **PREVIOUS OUTLINE**              May  
2012                      **DATED:**                      2011

**APPROVED:**

***"Corey Meunier"***  
**CHAIR**

**TOTAL CREDITS:**

**PREREQUISITE(S):**

**HOURS/WEEK:**

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**For additional information, please contact Corey Meunier, Chair**  
**Technology & Skilled Trades**  
**(705) 759-2554, Ext. 2610**

**I. COURSE DESCRIPTION:**

This course introduces the student to electrical installation methods for commercial applications. The Canadian Electrical Code is covered in conjunction with interpretation of construction drawings and specifications for an industrial installation.

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

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

1. ***Upon successful completion of this course, the student will demonstrate the ability to: Interpret and revise specifications and drawings for a small commercial construction project.***

Potential Elements of the Performance:

- Determine utility location and site features that affect electrical installations through the use of site drawings.
- Use architectural and structural drawings to determine methods of construction as they affect electrical installation.
- Use architectural and structural drawings to determine dimensions and elevations as they affect electrical installation.
- Use mechanical drawings to determine the electrical characteristics of mechanical equipment and systems.
- Use mechanical drawings to determine the layout of mechanical equipment and systems as they affect electrical installation.
- Select the correct wiring methods and electrical equipment for a commercial installation.
- Use a complete set of drawings and specifications to lay out commercial distribution and service equipment and wiring.
- Describe common lighting systems and their applications.
- Lay out commercial branch circuit wiring, lighting, and equipment using drawings and specifications.
- Use a complete set of drawings, specifications, manufacturers' drawings, ULC Standards, the National Building Code and the

CEC to lay out a fire alarm system.

- Lay out a control system or a communication system as per drawings and specifications.
- Use a complete set of drawings, specifications, manufacturers' drawings, and the CEC to prepare a material take off.
- Prepare sketches to solve and document construction problems and solutions.
- Prepare as-built drawings to document electrical construction.
- Read and develop basic single line, schematic, and wiring diagrams.

### **III. TOPICS:**

1. Commercial print reading.

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

- *Ontario Electrical Safety Code (current edition)*
- *Electrical Wiring Commercial (Current Canadian edition published by Delmar)*

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

Quizzes (may be unannounced) 1% each to a maximum of 20%

Completion of Unit Questions 20%

2 or 3 Tests equally weighted 8%\*

\*see special notes.

Tests will not be returned but will be available for review.

The following semester grades will be assigned to students:

<b>Grade</b>	<b><u>Definition</u></b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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.

If a student misses a test he/she must have a valid reason (i.e. medical or family emergency – documentation may be required). In addition, the instructor must be notified prior to the test sitting. If this procedure is not followed the student will receive a mark of zero on the test with no make-up option.

There are no make-up tests, assignments or extra work allowed for any reason.

Any material covered during any absence legitimate or not is the responsibility of the student.

For this course **WebCT/LMS** is considered as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool

Deadlines will be specified for submission of assignments for grading. Late assignments will not be accepted and a grade of 0 will be assigned.

Required texts are brought to each class. Sections of the course text books may be highlighted however they are not to be written in. Tests will be 'open book' as far as the textbooks are concerned. However, use of a book containing markings other than the aforementioned highlights is not permitted and will be considered as academic dishonesty. Students are responsible for supplying their own texts for tests. Sharing books during a test is not permitted.

Use of cell phones/PDAs for any form of communication (voice, text...) during class or lab time is strictly prohibited. **Cell phones/PDAs must be silenced during regular class and lab times and must be turned off and kept out of sight during test sittings. Failure to follow the latter requirement during a test sitting will result in a grade of 0 being assigned.**

Students may not wear earphones of any kind during lab activities or test sittings. This does not include hearing aids required for the hearing impaired.

## VII. COURSE OUTLINE ADDENDUM:

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