



**I. COURSE DESCRIPTION:**

This course is a continuation of ELR623, Canadian Electrical Code Level I. The primary focus will be on code sections relating to commercial wiring practices.

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

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

**1. *Interpret the Canadian Electrical Code (CEC) requirements pertaining to commercial installations.*****Potential Elements of the Performance:**

- Calculate the minimum ampacity of conductors and overcurrent devices for:
  - Apartment and Similar Buildings
  - Schools
  - Hospitals
  - Hotels, motels, dormitories, and buildings of similar occupancies
  - Other types of occupancies
- Interpret the CEC regulations for protection including fuses, circuit breakers and ground fault protection and control devices including switches, panelboards and solid state devices (Section 14).
- List and explain the requirements for different classifications of hazardous locations.
- Interpret the CEC regulations pertaining to hospitals (Section 24).
- Interpret the CEC regulations pertaining to Storage Batteries.
- Explain the CEC installation requirements as applicable to branch circuits, overload, and overcurrent protection for individual continuous and non-continuous duty service motors (Section 28).
- Interpret the CEC regulations as applicable to interior and exterior lighting equipment (Section 30).

- Interpret CEC regulations governing the installation of optical fibre cables including non-conductive optical fibre, conductive optical fibre and hybrid cables (Section 56); coaxial cables including protection, grounding, indoor, outdoor, overhead and underground installations (Section 54); and communication cables including protection, grounding, indoor, outdoor, overhead and underground installations (Section 60).

### III. TOPICS:

1. Canadian Electrical Code, Commercial Rules

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

Ontario Electrical Safety Code, 24th Edition/2009

### V. EVALUATION PROCESS/GRADING SYSTEM:

Quizzes (may be unannounced)

1% each to a maximum of 20% 0 to 20%

3 or 4 Tests\* equally weighted 80 to 100%

\*See special notes.

The following semester grades will be assigned to students:

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

## 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.