



**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, 23<sup>rd</sup> Edition/2002  
ISBN # 1-55324-570-9

### V. EVALUATION PROCESS/GRADING SYSTEM:

Course grade will be based on three or four equally weighted tests.  
See special notes.

The following semester grades will be assigned to students:

<b>Grade</b>	<b>Definition</b>	<i>Grade Point Equivalent</i>
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:

### Special Needs:

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. Visit Room E1204 or call Extension 493 so that support services can be arranged for you.

### Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

### Course outline amendments:

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.

Substitute course information is available in the Registrar's office.

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.

Code books are to be brought to class. Tests will require the use of a code book and students are responsible for bringing a copy 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 code book is 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 test. Sharing books during a test is not permitted.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.