

**Clackamas Community College**  
Online Course/Outline Submission System

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**Section #1 General Course Information**

**Department:**Apprenticeship

**Submitter**

First Name: Shelly

Last Name: Tracy

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**Course Prefix and Number:**APR- 219LE

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**# Credits:**4

**Contact hours**

Lecture (# of hours): 48

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 48

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

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**Course Title:**ADA & Code

**Course Description:**

Covers review of math dealing with Ohm's Law, Kershov's Law, trigonometry, voltage drop calculations and how to calculate horsepower to amperage depending on what type of electricity is being used. Also included are the newest changes in the National Electrical Code (NEC), basic Americans with Disabilities (ADA) requirements and test preparation for the Journey Level Limited Energy exam.

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**Type of Course:**Career Technical Apprenticeship

Can this course be repeated for credit in a degree?

**No**

Does this course map to any general education outcome(s)?

**No**

Is this course part of an AAS or related certificate of completion?

**Yes**

**Name of degree(s) and/or certificate(s):**Electrician Apprenticeship Technologies AAS, Electrician Apprenticeship Technologies Certificate of Completion, Limited Electrician Apprenticeship Technology Certificate of Completion

Are there prerequisites to this course?

**Yes**

**Pre-reqs:**Accepted into the Limited Energy Apprenticeship program

**Have you consulted with the appropriate chair if the pre-req is in another program?**

**No**

Are there corequisites to this course?

**No**

Are there any requirements or recommendations for students taken this course?

**No**

Are there similar courses existing in other programs or disciplines at CCC?

**No**

Will this class use library resources?

**No**

Is there any other potential impact on another department?

**No**

Does this course belong on the Related Instruction list?

**No**

**GRADING METHOD:**

A-F Only

**Audit:Yes**

When do you plan to offer this course?

**✓ Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

**No**

Will this course appear in the college catalog?

**No**

Will this course appear in the schedule?

**No**

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. calculate problems using Ohm's Law, Kershov's Law and trigonometry to solve limited energy installation and repair requirements,
2. calculate voltage drop, and horsepower to amperage,
3. interpret and apply pertinent ADA laws to properly place and install limited energy equipment to meet accessibility requirements,

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***This course does not include assessable General Education outcomes.***

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Major Topic Outline:

1. Intro & Orientation to ADA and NEC.
2. Tab National Electrical Code.
3. NEC updates as required by OAR.
4. Tables Oregon Specialty.
5. Administrative Rules.
6. Oregon Revised Statutes (ORS).

Does the content of this class relate to job skills in any of the following areas:

- |                                      |           |
|--------------------------------------|-----------|
| 1. Increased energy efficiency       | <b>No</b> |
| 2. Produce renewable energy          | <b>No</b> |
| 3. Prevent environmental degradation | <b>No</b> |
| 4. Clean up natural environment      | <b>No</b> |
| 5. Supports green services           | <b>No</b> |

Percent of course:0%

First term to be offered:

**Next available term after approval**

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