

Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Apprenticeship

Submitter

First Name: Shelly

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Phone: 0945

Email: shellyt

Course Prefix and Number: APR - 113UM

Credits: 5

Contact hours

Lecture (# of hours): 55

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 55

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.

Course Title: Metering: Basics III

Course Description:

This course continues first-year apprentice training by applying mathematics, electron theory and all aspects of DC electric circuit evaluation and construction and safe work practices.

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

Are there prerequisites to this course?

Yes

Pre-reqs: Successful completion of APR-112UM Metering Basics II

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?

Yes

Have you talked with a librarian regarding that impact?

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: No

When do you plan to offer this course?

✓ Spring

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. identify tools of the trade,
2. demonstrate proper care of tools,
3. summarize the basics of solid state device theory,
4. demonstrate an understanding of the various types of batteries by describing their characteristics,
5. apply the principles and demonstrate the use of basic trigonometry.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Solid state device theory and operation.
2. Battery technology and theory.
3. Trigonometric principles, right triangles, sines, cosines, tangents, graphing.
4. Basic tools of the trade, care and use.
5. Test equipment.
6. Protective line devices, care and use.

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

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

Percent of course: 0%

First term to be offered:

Next available term after approval

:

