

# Clackamas Community College

## Online Course/Outline Submission System

Show changes since last approval in red

APR-111UE Line Estimator Basic I: Tools and Equipment

General education certified:  Yes  No

- Writing
- Oral Communication
- Arts and Letters
- Science & Computer Science
- Mathematics
- Social Science
- Cultural Literacy
- Health & Physical Education

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Approved Date (mm/dd/yyyy):  /  /

### Section #1 General Course Information

**Department:** Apprenticeship

**Submitter**

First Name: Shelly

Last Name: Tracy

Phone: 0945

Email: shellyt

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**Course Prefix and Number:** APR - 111UE

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**# Credits:** 4

**Contact hours**

Lecture (# of hours): 44

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 44

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:** Line Estimator Basic I: Tools and Equipment

**Course Description:**

This course covers the principles and concepts that govern field operations. Students will learn to explain and summarize the basics of electric utility energy systems. The focus is on estimator field responsibilities and equipment used in the field.

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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 Technology AAS

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

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

Yes

**Recommendations:** None

**Requirements:** Accepted into the Line Estimator apprenticeship program

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?

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. list and describe the qualities of a good foreman and a good crew member,
2. summarize the training agreement, the authority of the JATC, and the history of the IBEW and National Electrical Contractors Association,
3. define energy charges, power factor charges and demand charges,
4. outline the importance of job-site safety, including OSHA requirements, personal protective equipment (PPE) and procedures that prevent hazardous situations,
5. distinguish between energized line parts and other parts of electrical equipment and identify the safe distance for approaching exposed energized parts,
6. explain field operations and electrical utility systems, including operational standards and service area requirements,
7. design, develop and disseminate field- and operational-level performance measurements,
8. identify common tools of the trade and describe how to use them safely and productively,
9. list the elements of climbing safety, the four basic steps for pole top rescue, and potential climbing hazards and how to prevent them,
10. discuss procedures for setting poles and list and describe the types of wood poles and the hazards of deterioration.

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This course does not include assessable General Education outcomes.

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**Major Topic Outline:**

1. Quality characteristics the electric industry joint training committee (JATC) seeks in an applicant for training.
2. The relationship between labor and management in terms of employer profits, employee wages and customer relations.
3. Protecting yourself and others from electrical shock hazards by understanding how electrical shocks occur.
4. Precautions which need to be taken to protect the public and workers.
5. Caring for and inspecting climbing equipment.
6. Communication in the electrical industry.
7. Uses for and care of rubber blankets and line hoses.
8. Four acceptable methods of bucket rescue.
9. Duties of the authorized entrant, attendant and entry supervisor when working in permit-required confined spaces.
10. Major elements of the OSHA Blood-borne Pathogen Standard.
11. Safety precautions associated with hauling and unloading poles.
12. Pole preparation terminology.

**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  
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