Clackamas Community College

Online Course/Outline Submission System

Show changes since last approval in red Print Edit Delete Back
Reject Publish

Section #1 General Course Information

Department: Energy & Utility Resource Management

Submitter

First Name: Shelly
Last Name: Tracy
Phone: 0945
Email: shellyt

Course Prefix and Number:ERM - 162

 # Credits:3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 60
Lab (# of hours):
Total course hours: 60

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: Groundworker Training

Course Description:

Prepares the student for basic Groundman responsibilities. This course provides the training, field competency, and documentation to become qualified to assume duties of a bid Groundman.

Type of Course: Career Technical Preparatory

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

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): Utility Trade Prep: Lineworker Pathway Cert.

Are there prerequisites to this course?

Yes

Pre-reqs: Pass ERM-161 with a C or better

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?

Yes

Recommendations: None

Requirements: Instructor consent

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?

✓ **Winter**

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?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

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

1. explain the path of electricity from generation to a meter and point out the path,
2. list characteristics of each: transmission, distribution, and secondary circuits, identify the general location on a power pole for the transmission, distribution, secondary, and communication circuits;
3. identify line related tools including underground (UG) tools,
4. select correct transformers for installation,
5. inspect, care and store protective equipment i.e. Rubber hoods, rubber blankets, gloves, stove pipes and line hose;
6. identify anchors, extensions, guy wire and sleeve size for hardware assembly of poles;
7. assemble a set of cross arms, double cross arms and a set of double dead-end arms;
8. identify transmission material,
9. explain and perform rigging techniques,
10. explain and perform the pre-flight checklist, bucket truck set-up and bucket rescue from the ground,
11. set a pole by hand,
12. set a pole using the digger derrick.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Groundman circuit recognition.
2. Line related tools and how to identify UG tools.
3. Select transformers.
4. How to inspect protective equipment.
5. Identify anchors, extensions, guy wire and sleeve size for assembly of pole.
6. Identify transmission material.
7. Advanced rigging techniques.
8. Bucket truck set-up and rescue techniques.
9. Setting a pole by hand.
10. Hand line, rope and blocks.
11. Types of slings.
12. Crane operations.

13. Personal performance for team efficiency
14. Cost of personal errors related to performance
15. Equipment performance
a. Excavator

b. Forklift
c. Bucket Truck
d. Digger Derrick

16. Job Site
a. Tailboard (worksite and job layout)
b. Advanced Hand Signals
c. Digger Derrick (setting & removing poles)
d. Plumb Bob
e. Advanced Ropes & Knots
f. Advanced Capstan & Rigging
g. Bucket Truck (raising transformers & cross arms)
h. Transformer Gen

17. Introduction to utility job options
a. BPA presentation
b. North Sky presentation
c. Other utility related representatives

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
: