

Clackamas Community College
Online Course/Outline Submission System

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Section #1 General Course Information

Department: Welding

Submitter

First Name: Sue

Last Name: Caldera

Phone: 3065

Email: suec

Course Prefix and Number: WLD - 113B

Credits: 4

Contact hours

Lecture (# of hours):

Lec/lab (# of hours): 88

Lab (# of hours):

Total course hours: 88

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: Gas Metal Arc Welding/Flux Core Arc Welding (Wirefeed)

Course Description:

The second half of WLD-113 which provides the opportunity to acquire additional knowledge and skills needed to perform more advanced fillet and groove welds in vertical and overhead positions with the Gas Metal Arc and Flux Core Arc Welding processes. Welding codes, standards, and specifications will be reviewed.

Type of Course: Career Technical Preparatory

Is this class challengeable?

Yes

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): Welding AAS

Are there prerequisites to this course?

Yes

Pre-reqs: Pass WLD-113A

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 or Pass/No Pass

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?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

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

1. complete a safety test that includes applicable sections of the text book, Clackamas Community College safety rules and policies,
2. complete a progress chart of fillet welds with GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding) electrodes in the vertical and overhead positions using proper welding techniques,
3. complete a progress chart of groove welds with GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding) electrodes in the horizontal, vertical, and overhead positions using proper welding techniques;
4. perform destructive and nondestructive testing,
5. interpret welding procedure specifications and certification requirements,
6. research welding codes and standards,
7. operate carbon arc cutting and gouging, plasma arc cutting and oxyfuel cutting equipment.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Class orientation, safety, and shop practices.
2. Electrode selection and welding Techniques for horizontal, vertical, and overhead welding.
3. Destructive and Nondestructive testing.
4. Fillet welds in the vertical and overhead positions on steel.
5. Welding Procedure Specifications and certification requirements.
6. Groove welds on steel in the horizontal, vertical, and overhead positions.
7. Welding codes and standards.
8. Carbon arc cutting.

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

:
