

Clackamas Community College
Online Course/Outline Submission System

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Section #1 General Course Information

Department: Welding

Submitter

First Name: **Dustin**

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Course Prefix and Number: WLD - 115

Credits: 8

Contact hours

Lecture (# of hours):

Lec/lab (# of hours): 176

Lab (# of hours):

Total course hours: 176

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 Tungsten Arc Welding (GTAW)

Course Description:

Provides students with the opportunity to acquire knowledge and skills to set up and operate equipment to perform fillet and groove welds in all positions with the Gas Tungsten Arc Welding process. Plasma arc cutting will be covered. 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?

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. set up and operate GTAW (Gas Tungsten Arc Welding) equipment,
3. operate PAC (Plasma Arc Cutting) equipment,
4. complete a progress chart of welds with GTAW (Gas Tungsten Arc Welding) electrodes in the flat, horizontal, vertical and overhead positions using proper welding techniques;
5. perform destructive and nondestructive testing,
6. interpret welding procedures specifications and certification requirements,
7. research welding codes and standards,
8. set up and operate sheet metal shear.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Class orientation, safety, and shop practices.
2. Safety, set up and operation of GTAW (Gas Tungsten Arc Welding) equipment.
3. Safety, set up and operation of PAC (Plasma Arc Cutting) equipment.
4. Filler Metal selection and welding techniques.
5. Destructive and Nondestructive testing.
6. Fillet welds all positions on steel , stainless steel, and aluminum.
7. WPS (Welding Procedures Specifications) and certification requirements.
8. Groove welds all positions on steel , stainless steel, and aluminum.
9. Welding codes and standards.
10. Safety, set up and operation of sheet metal shear.

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 | Yes |
| 4. Clean up natural environment | No |
| 5. Supports green services | No |

Percent of course: 5%

First term to be offered:

Next available term after approval

:
