

Clackamas Community College
Online Course/Outline Submission System

Show changes since last approval in red

Section #1 General Course Information

Department: Automotive Technology: Auto Body Instruction

Submitter

First Name: **John**

Last Name: **Phelps**

Phone: **6378**

Email: **johnp**

Course Prefix and Number: AB - 235

Credits: 2

Contact hours

Lecture (# of hours):

Lec/lab (# of hours): **48**

Lab (# of hours):

Total course hours: **48**

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: Collision Repair Welding III

Course Description:

Aluminum welding for collision damage repair. Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW) processes are learned, along with related weld techniques and equipment/safety procedures.

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): Automotive Technology AAS

Are there prerequisites to this course?

Yes

Pre-reqs: AB-123

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?

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?

✓ Fall

- ✓ Winter
- ✓ 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?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

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

1. perform GTAW welds in all positions on auto body gage mild steel,
2. perform GTAW welds in all positions on auto body gage aluminum,
3. safely setup and operate GTAW and GMAW welding equipment for welding on steel and aluminum,
4. make practice repairs on automotive body and frame type materials that are sound and serviceable.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Equipment set-up and safety information.
 - a. GTAW (Gas Tungsten Arc Welding) process on steel.
 - b. GTAW (Gas Tungsten Arc Welding) process on aluminum.
 - c. GMAW (Gas Metal Arc Welding) process on aluminum.
2. Correct set – up of GMAW equipment, in preparation of welding.
3. Demonstrations of correct GMAW procedures for welding on light gauge aluminum material (1 mm – 2.5 mm) in all positions (flat, horizontal, vertical and overhead).
 - a. Butt welds with and without backing.
 - b. Lap welds.
 - c. Plug welds.
4. Cover the contents of I-CAR enhanced CD training program.

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

:
