

**Clackamas Community College**  
Online Course/Outline Submission System

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### 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 - 167PB

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**# Credits:**3

**Contact hours**

Lecture (# of hours): 33

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 33

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:**Plumbing Welding and Print Reading

**Course Description:**

Blueprint Reading: rough-in sheets, single line drawings, detail drawings and sections. Welding: Gas welding, cutting theory, soldering, brazing and cutting; flat and vertical weld and shielded metal-arc welding.

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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):**AAS.CONSTRUCTPB & CC.CONSTRUCTPB - Construction Trades, General Apprenticeship& AAS &

Are there prerequisites to this course?

**Yes**

**Pre-reqs:**Successful completion of APR-147PB

**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 Only

**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?

**No**

Will this course appear in the schedule?

**No**

Student Learning Outcomes:

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

1. read, interpret and apply information from rough-in and single-line drawings to plumbing installation procedures and understanding.
2. perform the various welds: gas, soldering, brazing, cutting, oxy-acetylene and shielded metal-arc.

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***This course does not include assessable General Education outcomes.***

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Major Topic Outline:

- Blueprint Reading
  - a. Rough-in sheets
  - b. Single line drawings
  - c. Detail drawings
  - d. Section drawings
- Welding
  - a. Gas
  - b. Soldering
  - c. Brazing
  - d. Cutting
  - e. Oxy-acetylene
  - f. Shielded metal-arc

Does the content of this class relate to job skills in any of the following areas:

- |                                      |           |
|--------------------------------------|-----------|
| 1. Increased energy efficiency       | <b>No</b> |
| 2. Produce renewable energy          | <b>No</b> |
| 3. Prevent environmental degradation | <b>No</b> |
| 4. Clean up natural environment      | <b>No</b> |
| 5. Supports green services           | <b>No</b> |

Percent of course:0%

First term to be offered:

**Next available term after approval**

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