

Discipline: Building Trades and Construction Date Submitted: June 13<sup>th</sup>, 2022

# Cerritos College ARTICULATION AGREEMENT

Cerritos College Course:
WELD 60 (1 unit)

Cerritos College
Artesia High School Course:
Welding 1

Artesia High School
Artesia High School
11110 Alondra Blvd.
12108 Del Amo Blvd.
Lakewood, CA 90715

## **Welding 1 General Course Description:**

This course is designed to introduce students to the basic principles of welding. Students will learn basic shop safety and safety rules. Basic characteristics of oxygen, acetylene and its outfit components. Assemble and disassemble of oxyacetylene torch cutting outfits and welding outfits. Practice oxyacetylene cutting (OAC) on 3/8" mild carbon steel, oxyacetylene welding (OAW) on 1/16" mild carbon steel and create personalized projects using the oxyacetylene process. Students will learn basic weld joints and welding positions. Introduction to power tools, hand tools and measuring devices. Students will receive instruction for on-the-job etiquette, job search and professionalism.

College Prerequisite(s): none HS Prerequisite(s): none

Advisories/Recommendations: none

#### **Course Content:**

- Introduction to shop, rules, dress code, class expectancy and safety test.
- Students must pass safety test with a 100% to be let into the lab.
- Introduction to oxyacetylene cutting (OAC), oxyacetylene welding (OAW) and equipment.
- Oxyacetylene characteristics and components.
- Oxyacetylene cutting.
- Oxyacetylene welding.
- Reading measuring devices and how to use basic hand tools.
- Basic weld joints and welding positions.
- Individual projects.
- Possible additional projects if time allows.

#### Competencies and Skill Requirements.

## At the conclusion of this course, the student should be able to:

- Students will learn appropriate and inappropriate behavior in the welding shop.
- Students will be able to choose proper welding attire along with personal protective equipment.
- Students will learn skills to properly feel safe when using an oxyacetylene outfit.
- Students will develop skills to properly use hand tools and power tools.
- Students will recognize that there are many welding processes.
- Students will differentiate the many career pathways.

- Students will be able to assemble and disassemble an oxyacetylene outfit and recognize
  when it is working properly.
- Students will apply hand and eye coordination when welding and cutting using an oxyacetylene outfit.
- Students will demonstrate proper shop safety.
- Students will identify the four classifications if fires as classified by the National Fire Protection Association (NFPA).
- Students will identify the four types of portable fire extinguishers
- Students will identify the approved eye and face protection specifications under the ANSI 87.1 code.
- Students will identify the specifications for headwear protection under the ANSI 89.1 code.

#### **Measurement Methods:**

- Participation and Effort
- Test
- Quizzes
- Classwork

## **Textbooks or Other Support Materials:**

- Welding skills 5<sup>th</sup> Edition, B.J. Moniz; ISBN 978-0-8269-3084-2 Orland Park, Illinois 60467-5756, American Technical Publishers.
- Notebook, pen and paper are recommended.

## **Procedures for Course Articulation:**

Cerritos College credit for the articulated course listed above may be received when the following criteria are met:

- 1. Student has completed the articulated course listed above, *Welding 1*, with a grade of "C" or higher.
- 3. Student must enroll at Cerritos College within two (2) years from the semester date in which the course was completed.
- 4. Student will complete and submit the Cerritos College *Petition for Credit by Examination for Articulated High School Course* form to the Office of Educational Partnerships & Programs at Cerritos College.
- 5. A maximum of 30 units may be awarded through credit by examination.

This Agreement will be reviewed annually and will remain in effect until cancelled by either party giving 30 days written notice.

High School/ROP District Signatures		Cerritos College Signatures	
Jose Bran Jose Bran (Jun 13, 2022 13:24 PDT)	Jun 13, 2022	Albert Allen (Jul 5, 2022 13:33 PDT)	Jul 5, 2022
Faculty/Department Chair	Date	Instructor/Division Chair	Date
Sergio Garcia Sergio Garcia (Jun 18, 2022 22:54 PDT)	Jun 18, 2022	Nick Real, (d.D.	Jul 5, 2022
Principal	Date	Dean of Instruction	Date
Dr. Mary Sieu (Jul 5, 2022 09:43 PDT)	Jul 5, 2022	Wei Zhou Wei Zhou (Jul 5, 2022 14:01 PDT)	Jul 5, 2022
Superintendent	Date	Vice President	Date