



## Articulation Request and Agreement 2018-2019

<b>Discipline:</b>	<b>Welding Technology</b>
<b>High School:</b>	<b>Sonora High School</b>
<b>High School Course:</b>	<b>Advanced Welding</b>
<b>Columbia College Course:</b>	<b>WT 121</b>
<b>Date Accepted:</b>	<b>2018-2019</b>
<b>Renewal:</b>	<b>2021-2022</b>

This request and agreement is submitted for consideration of the following course as an articulated course at Columbia College. Students would receive course credit at Columbia College.

### **Directions:**

- Complete a separate form for each course.
- Attach the course outline for the course.
- Attach the course final if course is to be considered for credit.
- Mail to: Dean of Career Technical Education, 11600 Columbia College Drive, Sonora, CA 95370

### **Completed by High School Instructor:**

<b>High School/ROP:</b>	Sonora High School
<b>Instructor Name:</b>	Todd Isman
<b>Mailing Address:</b>	430 North Washington Street, Sonora, CA 95370
<b>Email Address:</b>	tisaman@sonorahs.k12.ca.us
<b>Contact Number:</b>	209.532.5511 Ext 247

<b>High School / ROP/CTE Course Title:</b>	Advanced Welding
<b>HS/ROCP Credits:</b>	10
<b>HS/ROCP Prerequisite(s):</b>	Completion of Welding 1 with passing grad or can be challenged with instructor permission.
<b>High School / ROP/CTE Course Description:</b>	<p>The Advanced Welding course is available to students who have successfully completed the Welding 1 course and desire further instruction with the intent of passing Welding Certificate Tests in the SMAW (Shield Metal Arc Welding) process.</p> <p>Each student will be evaluated in all four welding positions (Flat, Horizontal, Vertical, Overhead) using 6010 and 7018 welding electrode.</p> <p>Students will show extensive knowledge in the setup, use and operation of Oxy-Acetylene torch, Plasma Arc Cutting (PAC), Carbon Arc Cutting (CAC), measuring and layout skills.</p>

<b>College Course Title:</b>	WT 121 – Welding Technology Level 1
<b>College Units:</b>	3.0
<b>College Prerequisite(s):</b>	None
<b>Advisories/Recommendations:</b>	None

**Course Content and Format:**

1. Welding Safety
2. Oxyfuel Cutting
3. Plasma Arc Cutting
4. Air Carbon Arc Cutting and Gouging
5. Base Metal Preparation
6. Weld Quality
7. SMAW Equipment and Setup
8. Shielded Metal Arc Electrode
9. SMAW Beads and Fillet Welds
10. Joint Fit Up and Alignment
11. SMAW Groove Welds with Backing
12. SMAW Open V-Groove Welds

**Competencies and Skill Requirements (Use additional pages as necessary)**

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

1. Identify safety
2. Explain Oxyfuel cutting processes and techniques
3. Demonstrate
4. Explain Plasma Arc cutting processes and techniques
5. Demonstrate proficiency in Plasma Arc cutting processes
6. Explain Arc Carbon Arc Cutting process and techniques
7. Demonstrate proficiency in Arc Carbon Arc cutting processes
8. Identify and describe Shielded Metal Arc Welding process and characteristics
9. Demonstrate proficiency in Shielded Metal Arc Welding (SMAW) processes
10. Identify and describe Shielded Metal Arc Welding electrodes characteristics
11. Determine correct SMAW electrode application
12. Identify and describe Shielded Metal Arc Welding beads and fillet welds characteristics
13. Set up and demonstrate appropriate SMAW bead welds.

**Measurement Methods (include any industry certification or licensure):**

1. Exams/Test
2. Quizzes
3. Oral Presentation
4. Projects
5. Class Participation
6. Class Work
7. Lab Activities
8. Standardized instrument objectivity measuring student knowledge
9. Competency-based written and practical tests which demonstrate the student's ability to learn and apply skills and concepts in accordance with minimum standards established by the instructor.
10. At the completion of the Welding 1 and Advanced Welding courses the student should have sufficient knowledge and skills to complete and pass Welding Certification Tests in the Shielded Metal Arc Welding (SMAW) processes.

above credit, students must complete a Columbia College Application for Admission within six (6) months of completing the high school course.

Sample Textbooks or Other Support Materials (including Software):

*ST Mann*

*12/14/18*

CC faculty Signature:

Date:

[Office use only.]

TOPs Code:

[Office use only.]

Internal Tracking Number:

**Completed by Columbia College**

Columbia College and Sonora High School faculty have met and agree on the terms of the articulation agreement.

Department Faculty Signature	x <i>ST Mann</i>	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	<i>12, 14, 2018</i>
CTE Dean Signature	x <i>[Signature]</i>	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	<i>12, 17, 2018</i>
CTE Transition Officer Signature	x <i>Carol Ellis</i>	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	<i>12, 17, 2018</i>
Admissions and Records Notified			<i>12, 17, 2018</i>
High School Notified			<i>12, 17, 2018</i>