Northeast Arizona Technological

Institute of Vocational Education

P.O. Box 710 ● Kayenta, AZ 86033 ● (928) 466-8693

**Mission Statement**

To provide a quality education for all our students

**Welding I/ WLD 102**

**Introduction to basic structural Steel Welding**

**Fall 2025**

**General Information**

* Course Title: Welding I
* Course Schedule: August 9th – Dec 17th
* Location: Tuba City High School Room # 404
* Instructor: J. Yazzie
* Contact Information: Telephone 283-1050, Ext. 5506, E-mail: jyazzie@tcusd.org

**Course Prerequisites**

Introduction to welding

 **Career Safe OSHA 10 – Passing Score - 100%**

**Course Description**

Time Bock: 1 Semester

Grade Level: 11-12

This course is designed to introduce students to the requirements of an entry level structural steel welder. A safety course is also required for students to participate in any and all welding lab activities to ensure that students are in compliance with OSHA standards in any welding program. The safety course must be passed with an 100% or higher. In welding I, students will review the requirement in Introduction to welding and include skills such as Welding a T-joint and Lap joint in the 3F, and 4F positions in accordance with the AWS D1.1. These welds will be complete using GMAW and SMAW processes. Oxy-Acetylene torch welding will also be included. Welding I is also articulated with Coconino Community College as WLD 102.

This course is 60% Lab time.

**Textbook and Required Materials**

Jeffus, Larry. (2004). Welding Principles and Applications. Second Edition. Thompson Delmar Learning.

**Course Outline**

* Chapter 2: Safety in welding
* Chapter 4: Shielded Metal arc welding of plate
* Chapter 6: Advanced Shielded arc welding.
* Chapter 7: Flame cutting
* Chapter 8: Plasma Arc cutting
* Chapter 12: Flux Core Arc Welding equipment, setup, and Operations
* Chapter 13: Flux Core arc welding
* Chapter 20: Testing and Inspection of Welds
* Chapter 25: Filler Metal Selection
* Chapter 28: Oxyfuel Welding and Cutting equipment, setup and Operations
* Chapter 30: Oxyacetylene Welding
* AWS D1.1 Structural Steel Code – Steel

**Assessment of Student learning Outcomes**

Methods of assessment will include writing assignments with editing and rewriting opportunities. KWL’s for students learning outcomes, Rubrics for Industry standard welding equipment setup and operations, Pre-reading and Pre-writing guides, Research projects and presentations, graphic organizers on multi-welding processes, Textbook assignments, Participation in Coconino community college welding exercises, and formative and summative quizzes and tests.

**The grade for this course will be determined as follows**

|  |  |  |
| --- | --- | --- |
| **Type** | **Title** | **Points Possible** |
| Writing Assignments 9-10.W.29-10.W.69-10.W.7 | Writing assignment # 1Writing assignment # 2Writing assignment # 3Writing assignment # 4Writing assignment # 5 | 10 points10 points10 points10 points10 point |
| Reading Assignments9-10.RI.29-10.RI.7 | Reading assignment # 1Reading assignment # 2Reading assignment # 3Reading assignment # 4Reading assignment # 5 | 10 points10 points10 points10 points10 points |
| Textbook Assignments | Ch 2, Ch 4, Ch 6, Ch 7, Ch8, Ch 12, Ch 13, Ch 20, Ch 25, Ch 28, Ch 30 | 5 points each |
| Handouts | SMAW, OxyFuel, KWL’s, graphic organizers, Chapter quizzes, Welding Defects, Venn Diagrams, Lecture Notes, Notes, Weld Symbol worksheets, Math Assessments, etc | 5 points |
| CCC WLD 102 requirements | T-joint and Lap joint weld on 3/8” plate in the 3F, and 4F positions. | 50 points50 points |
| Participation Points | Welding exercises | 50 points |
| Exams | Safety ExamMid-TermFinal Exam | 50 points50 points50 points |
| Extra Credit | Extra credit assignments | 5 points |

Total Points: 450

 **A** 90-100% of all possible points

 **B** 80-89% of all possible points

 **C** 70-79% of all possible points

 **D** 60-69% of all possible points

 **F** less than 60% of all possible points

**Rules and Regulations**

* TCHS student handbook rules
* Be on time
* Be Respectful to others
* Use Signals for help
* 110% participation
* Follow all Directions carefully
* Students are responsible for missed assignments due to absences

**Bathroom room and Water fountain**

There are no bathroom breaks for the first 20 minutes and last 20 min of class. Students shall use hall passes only for bathroom and bathroom passes are limited to one at a time and no more than 4 minutes. Students will also sign in and out for bathroom breaks. Failure to do so will result in loss of bathroom privileges. Water fountain is located in the welding shop.

**Late Assignments**

Assignments shall be completed on time and turned in to the in basket. Late assignments up to 1 week shall be penalized 10% or grade and 20% for two weeks late. After two weeks late assignments are encourage to be turned to be graded but the grade will not be accepted. Special circumstances will be considered, but “I forgot” and related excuses is not justification. There will be plenty of opportunity to complete all work in class.

**Discipline Plan**

**Positive Consequences**

* Smiles or signs of approval – When students behave appropriately I will smile, nod, high five, pat on the backs, and just general signs of approval
* I will say out loud that I am glad they are working together and I will also explain the exact behavior on how it has resulted in class success.
* Special privileges will also be granted for outstanding class behavior such as enjoying their favorite activity 2-3 times in a semester.
* I will also send notes home to parents or guardians to express my appreciation for their student’s behavior and how much that has contributed to the overall success of the class.

**Negative Consequences**

* I will give students “the look” or a stern glance when they are misbehaving.
* I will use physical proximity by moving closer to whoever causing disruptions and maybe tell them what rule they are breaking.
* If the behavior continues I might remove the student from the rest of the group until they can control their behavior and have the student fill out a behavior reflection log. This is a running log and includes step 1– 3before any administrative action is required. Just depends on the severity of the situation.
* Contacting parents/guardians for advice, and involving administration is my last step. This is when I can turn in the behavior reflection log’s to show that I have done several steps of intervention before resorting to the Dean’s help.

Please Sign and Return the form below

I have read and acknowledge the requirements to participate in Welding I at TCHS

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

Students Name Date

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature

I have read the syllabus and guidelines for Welding I and will encourage my student to abide by the guidelines established above.

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Parent/Guardian Signature Date