

**Basic Course Information**

|                   |  |                     |                                   |
|-------------------|--|---------------------|-----------------------------------|
| Semester:         | <b>SUMMER 2023</b>                         | Instructor Name:    | <b>CARLOS ARAIZA</b>              |
| Course Title & #: | <b>SHIELDED METAL ARC WELD ON PIPE 230</b> | Email:              | <b>Carlos.araiza@imperial.edu</b> |
| CRN #:            | <b>30141</b>                               | Webpage (optional): |                                   |
| Classroom:        | <b>3120</b>                                | Office #:           | <b>3121</b>                       |
| Class Dates:      | <b>20 JUN 2023-27 Jul 2023</b>             | Office Hours:       | <b>T,W,R. 12-30- 1.00PM</b>       |
| Class Days:       | <b>MTWR</b>                                | Office Phone #:     | <b>760-355-6319</b>               |
| Class Times:      | 07.30 AM TO 12.25 PM                       | Emergency Contact:  | <b>442-231`-9622</b>              |
| Units:            | 3  |                     |                                   |

**Course Description**

*Emphasis is on skills development for SHIELDED METAL ARC WELDING on carbon steel pipe open root with use of E6010 and E7018 electrodes. Proper use of filler metal and welding joint designs are emphasis though out the course .Oxy/Acetylene cutting process is used to preparing the coupons.*  
 Proper use of filler metal and welding joints designs are emphasis throughout the course.  
 GMAW,FCAW, process are using to prepare the coupons.  
 Recommended ; WELD 100 and WELD 125

**Student Learning Outcomes**

Explain a set of three existing hazards in the SMAW pipe welding environment and identify applicable standards. Describe and demonstrate preparation of pipe sample for a BEND TEST METHOD of DT to determine accept/reject status for SMAW pipe samples.

Institutional Student Learning Outcome

- 1-COMMUNICATION SKILLS
- 2-CRITICAL THINKING
- 3-PERSONAL RESPONSIBILITY
- 4-INFORMATION LITERACY
- 5-GLOBAL AWARENESS

**Course Objectives**

Use from [CurricUNET](#) course outline of record.]

Measurable Course Objectives and Minimum standards for grade of C Upon satisfactory completion of the course , student will be able to :

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## Textbooks & Other Resources or Links

*Welding Level 2 from NCCER NATIONAL CENTER FOR CONSTRUCTION EDUCATIONAL AND RESEARCH  
ISBN 13 978-0-13 609970-X*

*HOBART INSTITUTE OF WELDING TECHNOLOGY – ISBN 978-1-936058-04-12*

*MODERN WELDING TECHNOLOGY ISBN 978-1-60525-077-14*

## Course Requirements and Instructional Methods

*Prepared a writing report based on information gathered from Technical Literature Review of SMAW and its many uses in Manufacturing and Construction.*

*Out of class.*

*Reference the text book (SMAW Equipment chapter 5 and AWS D1.1 Steel Structural Welding Code) and the list of components needed to have a complete welding circuit. List the chemical composition of the E6010 electrode, and the E7018 electrode.*

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

## Course Grading Based on Course Objectives

- 1- Attendance; First day of class, regular attendance and withdrawal after exceeding the number of class hours per week.
  - 2- Tardiness: Three times equals one absence.
  - 3- Absences: 3 absences equal an automatic drop.
  - 4- Grading will be based on the following methods.

|                         |                     |
|-------------------------|---------------------|
| Chapter quiz            | = 400 points        |
| Final Exam Written Exam | = 300 points        |
| Final Lab Exam          | <u>= 300 points</u> |
| Total Possible Points   | 1000 points         |
- A=90%-100% = Excellent  
B=80% 89% Good  
C=70%-79%  
D=60%-69% Satisfactory  
F=Failing
- 5- When the student missed a quiz, test, or homework assignment the student lost 30% of the grade.

## Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

## Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the [General Catalog](#).
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

## Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!)].

## Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- **Plagiarism** is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- **Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General Catalog](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

## Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Blackboard Support Site.** The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **Library Services.** There is more to our library than just books. You have access to tutors in the [Study Skills Center](#), study rooms for small groups, and online access to a wealth of resources.

## Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the [Disabled Student Programs and Services](#) (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be

evaluated for educational accommodation.

### Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **[Student Health Center](#)**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6128 in Room 1536 for more information.
- **[Mental Health Counseling Services](#)**. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC [Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

### Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

### Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.

### Anticipated Class Schedule/Calendar

| Date or Week      | Activity, Assignment, and/or Topic                                    | Pages/ Due Dates/Tests             |
|-------------------|---|------------------------------------|
| 6/20/23           | SAFETY AND HEALTH OF WELDERS  | LESSON 1A, 1B, 1C                  |
| 6/23/23           |   |                                    |
| 6/26/23           | DEMONSTRATED PROPER WORK ACTION WITH WELDING CODES AND SPECIFICATIONS | LESSON 2,4,5,6                     |
| 6/30/23           |   | ALL JOBS IN LESSON 6C AND LESSON 8 |
| 7/3/23 TO 7/27/23 | SMAW MANUAL WELDING WITH API AND ASME SECTION IX WELDING CODE         |                                    |
|                   | MECHANICAL PROPERTIES OF CARBON STEEL PIPE ON 5G AND 2G POSITION      | CHAPTER 7 ELECTRODES FOR SMAW      |

**\*\*\*Tentative, subject to change without prior notice\*\*\***