

ADV WELDING AND FABRICATION

WLD2230 001

Instructor Information

Course Description

Theory of wire feed welding on ferrous and nonferrous base metals with and without the use of pulse and pulse spray transfer modes. Theory of welding metallurgy, shielding gases and filler metal classification. Gas Metal Arc Welding and Gas Tungsten Arc Welding and Shielded Metal Arc Welding including an emphasis on welder qualification per American Welding Society D1.1 structural welding code.

Prerequisite(s): Certificate of completion in welding from the Salt Lake Technical college at SLCC
Corequisite(s): WLD 2231
Semester(s) Taught: Fall, Spring

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Course Student Learning Outcomes

- Describe the safe and correct set-up for GMAW and GTAW welding equipment.
- Explain the differences in welding ferrous and non-ferrous metals and their metallurgical consequences.
- Explain the need for welding codes, destructive, and non-destructive testing of welds.

Course Prerequisites

Student must complete SLTC Welding Technology Certificate.

This course must be taken in the same semester as WLD2230.

Communication Plan

Example language:

- I will respond to email within 48 hours in person or via Canvas. I will offer feedback on major assignments weekly. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

- In this course I will be posting interactive announcements.
- This class uses the classroom for discussion not online in canvas.

Required Text or Materials

Title: Welding Principles and Applications (Ninth Edition)

ISBN: 978-0-357-37765-9

Authors: Larry Jeffus

Publisher: Cengage

Publication Date: 2020

Edition: Ninth

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Brief Description of Assignments/Exams

1. Unit quiz and homework work sheets (40%)
2. Mid-term (10 %)
3. Class attendance and participation (30%). There are 60 class periods – an absents equals .5 percent points from the 30% available for the attendance portion on the grading
4. Final exam (20%)

Grading Scale

A (92-100%) C (74-76%)

A- (89-91%) C- (71-73%)

B+ (86-88%) D+ (67-69%)

B (83-85%) D (64-66%)

B- (80-82%) E (below 64%)

C+ (77-79%) I (Incomplete)

UW (Unofficial withdrawal)

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)