

# Gas Metal Arc Welding II

TEWT - 1320 101

## Course Description

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This course will provide practice in the Gas Metal Arc Welding process. Safe practices and theory of GMAW will be continued. Students will learn how to properly set voltage, wire feed speed, and shielding gas flow for welding on carbon steel. In this course, students will perform basic safety inspections and maintenance of Gas Metal Arc Welding (GMAW) equipment.

Semester(s) Taught: All

## Course Student Learning Outcomes

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- Demonstrate safe shop and process practices.
- Perform equipment set-up and proper power source adjustment.
- Demonstrate welding skills on inside/outside corner joints, lap joints and butt joints in all appropriate welding positions.
- Identify, troubleshoot and perform basic machine maintenance.
- Follow welding procedure specifications.
- Execute practical weld tests and welder performance qualification.
- Critique welds to a quality standard.

## Engagement Plan

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I will respond to email within two days.

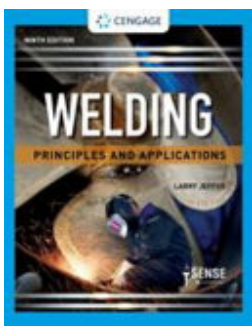
I will offer feedback on major assignments within one week.

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

## Keys for Success (how to succeed in the course)

Attendance and class Participation are critical to each student's success in the course.

## Required Text or Materials



**Title:** Welding

**ISBN:** 9780357377659

**Authors:** Larry Jeffus

**Publisher:** Cengage Learning

**Publication Date:** 2020-01-17

For more information on textbook accessibility, contact Accessibility & Disability Services at [ads@slcc.edu](mailto:ads@slcc.edu).

## Welding Tools & Personal Protective Equipment

Because of their personal nature, and the necessity for welders to have these items on a job, students are required to purchase their own PPE and tools. Each welding student should obtain the following PPE & Tools prior to starting lab courses:

PPE:

1 ea. - Welding Jacket

1 ea. - Split Leg Leather Apron or Leather Chaps, or Coveralls (Must be cotton, denim, or twill material. NO SYNTHETIC MATERIALS!)

1 ea. - Safety Glasses (Clear Lenses Only)

1 Pair - Heavy Welding Gloves

1 Pair – Medium Weight Welding Gloves

1 Pair - Light Weight Welding Gloves

1 Pair - Work boots (Over the ankle. Steel toes not required.)

1 ea. - Welding Helmet (Automatic) (Lincoln, Miller, or Speedglass brands preferred for Auto-darkening) must have grinding mode and cutting mode selection. Extra cover lenses and batteries.

1 ea. - Welding Cap (The uglier the better.)

#### Tools:

1 ea. - Wire Brush

1 ea. - Triple Flint Spark Lighter

1 ea. - Soap Stone with Holder (Rectangular shape preferred)

1 ea. - Vise Grip Pliers (Optional – Vise Grip “C” Clamp)

1 ea. - 25’ Tape Measure (3/4” to 1” blade width is best)

1 ea. - Combination Lock (Needed if you lease a locker)

1 ea. - Welding Tip Cleaner

1 ea. - Chipping Hammer

1 ea. - Welding Pliers (Special tool for wire feed processes. (WELPERS® or generic brand from discount tool stores)

1 ea. - Calculator (TI 30X IIS or Equivalent)

1 set – Fillet Weld Gauges

1 ea. – inspection flashlight

1 ea. – 4-1/2-inch angle grinder (Example: DeWalt DWE4011)

## Brief Description of Assignments/Exams

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At the completion of this course, students shall have demonstrated to the instructor job entry level competencies with the Gas Metal Arc Welding process in the following activities:

- Demonstrate safe shop and process practices
- Perform equipment set-up and proper power source adjustment
- Demonstrate welding skills on inside/outside corner joints, lap joints and butt joints in all appropriate welding positions
- Identify, troubleshoot and perform basic machine maintenance
- Follow welding procedure specifications
- Execute practical weld tests and welder performance qualification.
- Critique welds to a quality standard

## Assignment Schedule

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Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Introduce Yourself</a>	Discussion	0
	<a href="#">Introduce Yourself</a>	Discussion	0
	<a href="#">Module 1 Quiz</a> <a href="#">Chapter 10 GMAW I</a>	Quiz	35
	<a href="#">Module 1: Project A</a>	Assignment	4
	<a href="#">Module 2 Chapter 11</a> <a href="#">GMAW I</a>	Quiz	35

Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Module 2: Project B</a>	Assignment	4
	<a href="#">Roll Call Attendance</a>	Assignment	100

## Grading Scale

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A (90-100%)

B (80-89.9%)

E (Below 79.9%)

## How to Navigate to Canvas

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## Institutional Policies

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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.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

## Learning Support and Tutoring Services

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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, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. 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](#)

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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, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. 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](#)

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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](#)