



Welding III
Syllabus - 2025 - 2026

Jason Johnson

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Course Description:

This year-long course provides an in-depth understanding of the Gas Tungsten Arc Welding (GTAW) process, commonly known as TIG (Tungsten Inert Gas) welding. Participants will learn the fundamentals of GTAW, including equipment setup, electrode selection, and shielding gas use. The course covers various welding techniques, joint designs, and materials, focusing on achieving high-quality welds in stainless steel, aluminum, and other metals. Students will also be required to create a project that has drawings and dimensions and will take most of the second semester to complete

Upon completion, students will have the skills necessary to perform GTAW on a variety of materials and prepare for entry-level positions in welding as well as a student portfolio that will consist of photos of student projects and videos of students welding.

Course Outline

- Safety
- Gas Tungsten Arc Welding Equipment
 - GTAW setup and operation
 - GTAW of plate steel
- Reading Technical drawings
- Fabrication Techniques
 - Miller Open Book

Primary Resources:

Google Classroom

Welding Principles and Applications text, Larry Jeffus

Miller Open Book online modules

IC

Grade Breakdown:

Semester Grade	Practice	Formative	Summative
80%		30%	70%
20%	Semester Exam		

Grading Scale:

Grade	Percent	Grade	Percent	Grade	Percent
A+	97-100	B	83-86	C-	70-72
A	93-96	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	C	73-76	D-	60-62
F Below 60					

Late Work/Missing Work Policy:

Mukwonago Area Schools believes that feedback is an integral component to student success in teaching and learning. Mukwonago High School expects that all students will turn in work by the intended due date to receive full credit and necessary feedback. Students will have the opportunity to turn in practice and formative assessments up to 2 school days late to receive partial credit.

- **Full Credit:** Students *might* receive full credit if the practice or formative assessment is turned in on the due date.
- **Partial Credit:** Students will receive partial credit if the practice or formative assessment is turned in up to two school days after the due date.
- **Zero Credit:** practice or formative assessment can be turned in past the two days to remain eligible for reassessment; however, no credit will be given.

Assessment Policy:

Assessments are used to measure student learning of essential learning standards within a unit of instruction.

Cumulative Assessments (Ex. Projects, Essays, Presentations, Semester Exams): These end of unit assessments are final products of learning in which students have had several opportunities to make adjustments based on feedback. Retakes are not provided for these types of end of unit assessments. ***Not eligible for retake**

Summative Assessments (Ex. Test): This end of unit assessment uses various types of questions that students have studied but not previously seen. Students are eligible to reassess if the following criteria are met: practice and formative assignments for the unit have been completed and turned in prior to the summative assessment, student meets with their teacher to schedule a reassessment, and demonstrates relearning within 2 weeks of receiving the original assessment. The reassessment grade will replace the original summative grade, regardless if the new grade is lower than the original assessment. ***Eligible for retake**

Materials/Supplies needed:

- ☐ Charged device
- ☐ Pencil
- ☐ Notebook
- ☐ Welding clothes
- ☐ Safety glasses

Expectations & Classroom Conduct:

- No food in the classroom or Tech Ed hallway.
- Beverages must be in a sealable container.
- Safety gear must be worn at all times....NO EXCEPTIONS!
- Students must be in the classroom before the bell rings.
- Students are responsible for a clean classroom and lab area.

Tardiness will be tracked in Infinite Campus (IC), and the following steps will be taken for each occurrence:

1st Tardy: Verbal warning

2nd Tardy: 10-minute detention with the teacher (must be served within 2 days) and parent contact; administration will be notified through Educlimber.

3rd Tardy: Teacher will submit an IC office referral. Administration will meet with the student, assign an after-school detention, and contact the parent.

4th +: The teacher will submit an office referral in Infinite Campus (IC), and administration will determine appropriate consequences at their discretion.

Academic Honesty:

The Mukwonago Area School District emphasizes the importance of academic honesty and integrity as essential to education. Students are expected to complete and represent their work truthfully and are held accountable for academic misconduct, including cheating, plagiarism, and misuse of artificial intelligence. Teachers review the academic honesty policy at the start of each course. Consequences for dishonesty vary by offense: the **first offense** results in a zero on the assessment, parent contact, administrative review, and permanent ineligibility for National Honor Society; the **second offense** leads to another zero, a parent meeting with administration, and ineligibility for valedictorian or salutatorian honors; a **third offense** results in withdrawal from the course with a failing grade or audit status, and loss of honors pass privileges.

Tips for Success:

Focus on:

- **Steady hand and travel speed**
- **Proper angle** of the torch or rod
- Watching the **puddle** — not the arc
- Practicing **bead consistency** on scrap metal

Don't rush to weld big projects until your beads are consistent and strong.

All Mukwonago policies & procedures will be followed and enforced in this class as outlined in more detail in the [Mukwonago High School Student and Parent Handbook](#).