

# Welding 1 2019-2020

## **Course Information:**

This course is project-based course designed to provide the student with knowledge, skill, and a technology background in order for them to pursue craft, technology training, community college and apprenticeships, or college and university; and to prepare the student for workforce readiness. Possible certifications may be available after completion of coursework or online coursework during the semester. Emphasis will be placed on welding/cutting skills, safety, techniques, and project applications that apply to the manufacturing industry. This course is the prerequisite for Advanced Welding.

## **Teacher Information:**

**Instructors:**

**Joe Chambers: [josephchambers@misdmail.org](mailto:josephchambers@misdmail.org)**

## **Text, Readings, Materials:**

Welding Principles and Applications, Metal Fabrication Textbook, iTunes U, Google Classroom, AWS SENSE Curriculum, CEV, and Google Drive.

## **Required Materials:**

Clothing - Jeans (no holes or frayed edges), Long Sleeve Cotton Shirt, Boots (can be steel toe) **Bring in By: Monday August 27th**

Technology - We will be using laptops and personal electronic devices every day.

## **Course Calendar/Schedule:**

**Safety instruction will be on-going throughout the semester as will testing and text assignments as necessary. This is a tentative schedule that is intended to be flexible and is subject to change depending on needs of students and progressions during the semester.**

**Week 1: Introductions, Tool Review, General Safety Review**

**Week 2: Intro to drawings and weld Symbols**

**Week 3-5: SMAW Weld Positions**

**Week 6: AWS Testing – Drawings and SMAW**

**Week 7-8: GMAW Weld Positions**

**Week 9: AWS Testing - GMAW**

**Week 10-11: Thermal Cutting Processes and CAD**

**Week 12-13: Plasma Cutter Project – Test Grade**

**Week 14: FCAW**

**Week 15-16: Oxy-Acetylene Welding**

**Week 17-18: GTAW**

**Week 19: Individual Project**

**Week 20: Exam and Clean Shop**

**During this 20 week course we will cover basic safety, tool use and identification, job skills, careers in manufacturing, measurement, how to read**

and draw detail schematics and weld symbols, manufacturing processes such as welding, product design, production, and product marketing, and we will finish the class with a hands on project. We will be working through the AWS (American Welding Society) Program to help each student work on getting some of their welding certifications.

#### **Certifications:**

**AWS Weld Certifications** – Students will begin going over information and practicing and taking practice tests for the AWS D1.1 Welding Certification. Students will not receive any weld certifications by the end of this course, they are only beginning the process. Official Certification Test will be taken in the Advanced Welding Course.

#### **Grading Policy:**

**Major Grades – 40% (tests, projects, lengthy assignments, etc...)**

**Daily Work - 60%**

**First Six Weeks = 26%    Second Six Weeks = 27%    Third Six Weeks = 27%**  
**Semester Exam = 20%**

<b>A</b>	<b>90-100</b>
<b>B</b>	<b>80-89</b>
<b>C</b>	<b>70-79</b>
<b>F</b>	<b>Below 70</b>

#### **Clubs:**

**Students are encouraged to join and participate in afterschool activities such as the Ben Barber Welding Club, FFA, and Skills USA Welding Club.**

#### **Class Rules:**

All regulations found in the Students Technology Use Guidelines, Maintaining a Healthy, Active LAN, and Classroom Management Plan will be in place at all times. Students will not be allowed usage of any computer in the lab without parent/guardian signature on these documents and on file with the instructor.

The student may make arrangements to come before school, during break times, or after school to do make-up work per the MISD policy as stated within the Student Handbook as long as it is pre-arranged with the instructor. It must be noted that the student is responsible for making these arrangements within the scope and time allowed – not the teacher.

**Late work-**

- Teacher designates due date and time for assignment (Beginning of class period, End of class period, designated time of day)
- If student fails to meet the due date and time, then the student has till the next class period (next A day or B day) to turn in assignment to be considered one day late.
- Students will be assessed a penalty of 30% points for up to one class period late.
- Score of a zero may be given for work turned in after one day late.

**Tardiness:** Any Tardy to class will be treated per student handbook and regulations. If a Student is tardy 15 minutes after class is scheduled to start or re-start, they will be counted as absent. Any missed exams or assignments will be treaded according to the MISD Policy.

**Academic Dishonesty** – cheating or plagiarism – is not acceptable. Cheating includes the copying of another student's work – homework, class work, test answers, projects, etc – as one's own. Plagiarism is the use of another person's original ideas or writing without giving credit to the true author. A student found to have engaged in academic dishonesty will be subject to loss of credit for the work in question, as well as disciplinary penalties, according to the Student Code of Conduct.

**Work Clothes** – Students are required to have proper work wear when we are going into the welding lab. We will not need these clothes every day and the instructor will

**give notice before any activities are done in the lab. Students must have closed toed shoes (preferably leather boots), long denim pants (without holes or frays), and a long sleeve 100% cotton shirt. Students will be provided one pair of safety glasses if they lose or break them, the student is responsible for buying another pair or they will not be able to work in the lab and will be given zeros for all lab activities until they are replaced. Students must wear ear protection in the lab when work is being done. Students will be given a pair of reusable ear plugs or ear muff to use during class.**

**I look forward to having you (or your student) as a student and working with you for your success in this course.**

**Sincerely,  
Joe Chambers**

**X**

---

Parent

**X**

---

Student