

Oklahoma State University Institute of Technology
Face-to-Face Common Syllabus
Spring 2018

GTCT 1183 Welding

This welding course is designed to develop knowledge and basic skills in the welding of ferrous and non-ferrous metals using the arc processes of stick electrodes. Basic understanding and use of MIG (Micro wire Inert Gas) welding processes and the use of Oxygen-acetylene cutting torches are included.

Course Purpose: To obtain basic knowledge of welding techniques on Arc and Mig welding.

Type of Course: Theory/Lab

Credit Hours: 3; Total clock hours of theory per semester: 15;

Total clock hours of lab per semester: 60.

Class Length: 2nd Half

Class Days and Times: M, T, W, R, F / 7:30 – 9:25.

Prerequisites: None.

Instructor Name: Val Peterson

Instructor Phone: (918) 293-4743

Office: Bldg. 600, Rm. 117

Instructor Email: val.peterson@osuit.edu

Contact: My preferred method of contact is E-mail. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: 2nd half of the semester MTWR 2:30-3:00 pm

School Name: Construction Technologies

School Main Phone: 918-293-4742

REQUIRED TEXT, REFERENCES, AND MATERIALS

Texts: None

References: None

Materials: None

Uniform/Tools: Hand pliers, welder gloves, hat, boots (no tennis shoes), small tape measure, safety glasses, welder's hood (no. 10 lens)/goggles (no. 5 lens) and long-sleeved heavy cotton or fire rated shirt. No shorts. Some items are available at the campus book store.

Estimated Cost for Materials: \$ 0
Estimated Cost for Uniform/Tools: \$ 200.00

Optional Resources: None

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives
Understand Terminology and Definitions of SMAW & Oxy/Acetylene Cutting	Lab exercises, tests, and class participation
Develop a basic understanding of metallurgy	Class participation
Properly use of oxygen-acetylene in cutting various steel configurations/stick welding	Class participation
Basic use and understanding of MIG welding	Lab exercises, and class participation
Demonstrate safe work practices.	Lab exercises and class participation
Understand Terminology and Definitions of SMAW & Oxy/Acetylene Cutting	Lab exercises, tests, and class participation

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

COURSE ACTIVITIES

In this course students will:

- Participate by being on time, dressed appropriate and ready to learn
- View power points or videos that depict the various concepts
- Participate with in-class activities
- Work on all shop assignments in a safe manner

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS: *(NOTE-Please indicate the course specific evaluations. List assignment(s) used in the university's assessment of student learning as separate line items and marked with an asterisk.)*

Participation	20%
Safety Test	10%
Projects	60%
Final Exam	10%
Total	<u>100%</u>

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student's grade for this assignment will be used in the university's assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student's course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

Basic knowledge of the use of hand tools, grinders, basic math, and measurements required.

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in classroom activities.

LATE WORK

No late work will be accepted, unless arrangements have been made prior to the due date.

TESTING

Refer to "Academic Dishonesty" section of Syllabus Attachment

OTHER LAB AND CLASSROOM POLICIES

Students are expected to abide all safety rules during lab projects. No cell phones or laptops are allowed in classroom or lab except for specific times set by instructor.

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule			
Course Outline Schedule	Topic	Assignment	Due Date
Day1/Week 1	Cover Syllabus Familiarize students with the requirements and policies of General Welding & Shop work.		
Day2/Week 1	Explanation of the Lab assignments Relay total shop safety pertaining to Oxy/Ace torches, Arc Welders, Mig Welders, and All Grinding Tools. Stanley Teague – Safety Coord.	Written Safety Test	Next Class
Day1/Week 2	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 2	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 2	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 2	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 2	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day1/Week 3	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 3	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 3	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed

Day4/Week 3	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 3	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day1/Week 4	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 4	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 4	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 4	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 4	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day1/Week 5	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 5	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 5	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 5	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed

Day5/Week 5	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day1/Week 6	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 6	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 6	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 6	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 6	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day1/Week 7	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 7	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 7	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 7	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 7	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed

Day1/Week 8	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day2/Week 8	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day3/Week 8	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day4/Week 8	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed
Day5/Week 8	The remaining time in this welding class will be all lab time. Work at your own pace until the student has successfully mastered the 6 required welds on the Mig, and the Arc Machine.	Shop work and Welding Test	As Completed

Quiz could be given any time & will be on subjects/labs that have been covered.

Your participation grade is based on your participation in discussions both in class & labs.

This grade is judged every time we have class or a lab.

This schedule may vary depending on: unforeseeable circumstances that may arise; individual class rate of comprehension and evaluation; and at the discretion of the instructor.