

OHHS Career and Technical Education Metal Fabrications Syllabus



Course Name: Metal Fabrications

Course Code: CT0125

Duration: 2 Trimesters, 1 credit

Course Description: The metals technology course introduces students to basic metal forming, welding set-up, machine operations, and safety. The course is designed to help students develop their fabrication skills through work on assigned and personal projects. Students will take materials from its raw state and go through the fabrication processes to produce a useable product. The projects are designed to increase a student's measurement accuracies and quality control.

Prerequisites: None

Course Resources: Basic Metalwork by Feirer/ Lindbeck and Classroom Notebook

Course Fees: A lab fee of \$20 will be charged to each student to cover materials used in class. If student cannot pay lab fee other options are available. See teacher individually.

Note: Personal choice projects will require an additional fee to cover supplies. Students always have the right to bring their own materials.

Course Outline/ Instructional Units

- Shop safety and procedures
- Hand tool operations
- Metal machining and fabricating procedures
- Welding operating principles- Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), and Gas Tungsten Arc Welding (GTAW).
- OAW- students will learn cutting procedures.
- SMAW- students will learn to weld steel plate in all positions using 6010 and 7018 electrodes.
- GMAW- Students will learn to weld steel plate in all positions.
- GTAW- Students will learn to weld steel and aluminum in the flat position.

Major Assessments:

Projects/ labs: Projects and labs will be awarded points based on the amount of time contracted for a particular activity. A class period has a value of 10 points a day, based on an 60-day semester. Rotations are worth 200 points. Each rotation is approximately three weeks long (15 Days). Projects are graded on Craftsmanship, Quality of construction, Bill of materials, Plan of procedure, Working plans, lab write-ups, etc. Failure to complete required projects or participate in labs may result in an “F” for the semester.

Tests- performance/ Paper: Safety tests (passed to an 80% or better), bookwork, exams, etc. If you do not pass the safety test to 80% or better you have 2 days to make up test. If not you need to test orally before or after school.

Work Habits (Ethics): Strong work ethics are vital to getting and keeping a job for any extended period of time. Employers seek job candidate that poses a positive and safe work attitude. Employers expect their employees to show up to work on time and prepared to work.

Students will earn 10 points a day for demonstrating good work habits. Students can demonstrate good work habits by coming to class on time, giving a full days work, wearing safety glasses, and cleaning up assigned clean up area. Employees get fired from jobs for not meeting the employer’s expectations.

Weighted Categories

Category	Percentage of Overall Grade
Projects (Labs)	70%
Tests (Examinations)	20%
Work Ethics (Professionalism)	10%

Grading Scale:

Regular Scale

Letter Grade	Percentage
A	93% and Above
A -	90%-92.99%
B+	87%-89.99%
B	83%-86.99%
B-	80-82.99%
C+	77%-79.99%
C	73-76.99%
C-	70-72.99%
D+	67%-69.99%
D	60%-66.99%
F	59.99% and Below

RE-DO POLICY:

OHHS is an effort based school where we believe all students can learn. We also know that students learn at different rates. Thus, we are implementing a re-do policy that recognizes the needs of individual learners.

- 100% Re-do
 - Assessments (with exception of the Final semester exam)
 - Key Assignments: Evidence that demonstrates mastery of a standard
- Teachers may:
 - require completion of supporting assignments prior to re-do opportunities for students to show they can meet the standard.
 - require students to complete re-do of work outside of class time.
 - limit the number of re-do opportunities for each assignment.
 - assign zero grades when students choose not to do key assignments and/or assessments to standard.
- All opportunities for re-do work will come with a deadline as assigned by the teacher.

Tests may only be redone if the student has no missing assignments for the given unit. Students have one week to inform the teacher that they plan on doing a retake. Retakes are done after school.

Late work: Late work will not be accepted any later than 2 weeks after the due date. Late work is not eligible for a redo. Late work will go down by one letter grade each week that the assignment is late.

Attendance: Students are expected to attend class. If you are not in class you will not receive a work habits grade for the day you were absent. Absenteeism is not an excuse for missing assignments. Students are expected to check with the teacher either before they are absent or after the absence(s) to make up work that is missed. Special arrangements can be made to make-up work but it is the **student's** responsibility to ask the teacher.

Extra Help: If you are falling behind in class or having a hard time understanding the concepts being taught, you have some options to help you succeed.

1. Come in before or after school to get help from the teacher or work on your projects.
2. Do your plans at home and use class time to build guitar.
3. Get help from fellow classmates.

Clean-up Policy: Everyone is assigned a job and is expected to clean up. If you do not clean up your assigned area you will **lose 10 points a day** from your work ethics grade. If a student refuses to clean up then they will be tapped out of class and given bookwork.

OHHS Tardy Policy: Students are expected to be in their assigned seat and ready to work. If students are tardy they will lose 10 points a day from their work habits grade.

Tardy Procedure:

- 1st tardy student receives warning.
- 2nd tardy student Parent contacted.
- On the 3rd-5th tardy student will receive a detention.
- On the 6th tardy student will receive automatic referral to Deans.
- Failure to complete teacher assigned detention student's parents will be contacted and a referral for failure to show will be written.

OHHS PLAGIARISM POLICY:

Any student, who knowingly turns in any work that has been done by someone other than himself or herself, and fraudulently represents it as his/her own, shall be considered to have cheated. Cheating also includes: aiding someone else in cheating, the use or preparation of written, pictorial, electronic or other materials not authorized by the instructor during a test or assignment, the use of testing materials obtained previous to the test date, or plagiarism of any kind. Students found cheating will also be subject to an office referral, which could result in a suspension. As an effort based school, students who have plagiarized/cheated must still demonstrate their learning. Thus, students will be

given the opportunity to complete the work. This will fall under the “Late Work Policy” of the teacher where total possible points may be reduced.