

Name of School:

Name of Course: **Basic Welding**

Instructor Information

Name:

E-mail address:

School phone number:

Best times to be reached:

Course Description

The first in a sequence of four welding courses introduces students to the career of welding. Welding processes most commonly found in today’s world of work are emphasized in addition to cutting, grinding, drilling, measurement, and blueprint reading skills. The class incorporates basic math and writing skills into the daily “hands-on” activities. Leather gloves, safety glasses, and appropriate attire are required for this program.

District Standards and Benchmarks

District Standards and Power Benchmarks

Power Standards:

Students will be able to:

1. Utilize hand tools in their proper application in a safe manner.
2. Set up and troubleshoot welding parameters.
3. Complete welds in the major processes: SMAW, GMAW, GTAW.
4. Operate efficiently in a full functioning manufacturing environment

Power Benchmarks

1. Demonstrate the proper set-up and procedures for arc welding in four different positions.
2. Identify basic welding joints.
3. Demonstrates appropriate measuring techniques.
4. Demonstrates appropriate plasma equipment usage and cutting techniques.
5. Demonstrates appropriate ox-ace cutting equipment usage and cutting techniques.
6. Demonstrate the proper use of power tools.
7. Demonstrates emergency and safety rules.
8. Identify and troubleshoot weld defects.

Course Information

One term. Monday-Friday. 90 minutes each day. This an elective course worth .5 credits towards graduation offered at various times all through the year.

Course Outline

Safety
Cutting Operations
Stick Metal Arc Welding
Gas Metal Arc Welding
Introduction to Plasmacutting

Text/Other Required Materials/Resources

Text: Welding Skills
Required Equipment: Leather gloves, safety glasses, appropriate attire.

Instructional Procedures & Support

This class is largely a lab based class with individual student work in the weld booths taking place nearly everyday. A lecture format will be used when necessary and homework will be required. Attendance will be the major component in successful completion of the course and all assignments will be completed before welding will be allowed, no exceptions.

Classroom Management Procedures

The welding lab is a strict environment with freedoms provided only after respect for classroom rules and regulations are met and maintained.

Assessment Plan

Students will be able to estimate their placement on the grading scale daily by referencing a grade chart. Mid-quarter reports will also be sent home to parents as well as the quarterly grade. Grades will be based on averaging the top three student point totals and basing the scale from that point.

Grading System

A	93 and above	Firm command of knowledge domain High level of skill development
A⁻	90 - 92	Exceptional preparation for later learning
B⁺	87 - 89	Command of knowledge beyond the basic concepts of knowledge Advanced development of most skills
B	83 - 86	Has prerequisites for later learning
B⁻	80 - 82	
C⁺	77 - 79	Command of the basic concepts of knowledge Demonstrates ability to use basic skills
C	73 - 76	Lacks a few prerequisites for later learning
C⁻	70 - 72	
D⁺	67 - 69	Lacks knowledge of some fundamental ideas Some important skills not attained
D	63 - 66	Deficient in many of the prerequisites for later learning
D⁻	60 - 62	
F	59 and below	Most of the basic concepts and principles not learned Most essential skills have not been demonstrated Lacks most prerequisites needed for later learning

