Ag Welding and Fabrication- Fall Semester 2024

Mr. Van Berkom

Ag Welding

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Welcome!!

The Welding and Fabrication curriculum is designed to develop students’ understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate and maintain a variety of welding equipment and related tools. Subject matter may include Oxy-fuel Cutting, Heating and Welding; Soldering/Brazing; Shielded Metal Arc Welding (SMAW); Gas Metal Arc Welding (GMAW) and Plasma Arc Cutting. Safety and Metal Fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. Leadership development-FFA and Supervised Agricultural Experiences (SAE’s) are also integral to this course. 20-25 hours of hands-on welding lab experience is completed during this course. Students will meet at a selected welding lab/facility for hands on supervised welding instruction as a part of this course. Travel to the facility will be the responsibility of the local school. This class will include a combination of online and traditional classroom experience. A tentative outline will appear at the bottom of this syllabus. This course also will give students an opportunity to grow their Career Ready Practices.

ALL LATE SUBMITTED ASSIGNMENTS will be docked points (see below).

\*Communication with the instructor will be via Moodle messages.  Proper email etiquette should be followed:  be polite and courteous, don’t use all capitals, respond as soon as you can, correct punctuation, no misspelled words (proofread), follow the conventions of writing such as brief subject line, greeting or salutation, the body, and signature. Failure to properly or timely communicate would result in a deduction from the career ready grade for communication.

You will receive an email with your iCEV information.  Please check you junk mail or spam box for this email. If you did not receive this by August 21st, please email me.

**What do you need to access for this class???**

***Moodle***- This site will host instructions and assignments for you. Moodle will serve as the assignment board for class to find out what is going on. Scores will be displayed on Moodle, however your official grades for the class will be available on the PowerSchool link that is listed later in this syllabus. All assignment notices will be posted on Moodle, points will be deducted for not completing assignments prior to the posted due date/time.

Cractc.org (click on Moodle sign in)

***iCEV***-This site is used for welding lessons, questions, textbook recourses and quizzes. Login and password information will be sent to you when I set up your accounts. I can look up your login and reset your password if needed, just send me an email.

***PowerSchool CRACTC***- This is where you will be able to check your grades on completed or missing work. There are some grades that may appear in Moodle, however what appears in PowerSchool is what your schools will be using for eligibility and quarter grading.

<https://westernndctc.ps.state.nd.us/public/>

**Late Submitted Work:** All late submitted work can/will be docked a minimum of letter grade (possibly more) per week late. Certain online units need to be completed prior to hands-on days. If you don’t keep up with the online portions, you may not be allowed to participate in the hands-on activities.

Name: Make sure your first and last name appears on all submissions or attachments. Failure to do this may cost 1-5 % of the assignment grade.

Topics to be covered in this class:

Oxy-Fuel Welding and Cutting

SMAW(Stick Welding) and GMAW(Wire Feed)

Introduction to Welding Processes

Welding Safety Essentials

PPE for Welding

Safety for Metal Cutting

Electrical Safety for Welding

Introduction to SMAW

SMAW Applications

Introduction to GMAW

GMAW Applications

Welding Fumes and Gases Safety

Thermal Cutting Overview

Introduction to Welding