Agricultural Welding Class Syllabus

Course Title: Agricultural Welding

Instructor: Ms. Audrianna Bruce Contact Information: abruce@troyusd.org Class Time:

Course Description

Welcome to Agricultural Welding! This course provides practical training in welding techniques and safety, specifically tailored for agricultural applications. Students will learn about different welding processes, tools, and materials, and will complete hands-on projects that involve working with hot metals, flames, and sharp items.

Course Objectives

By the end of this course, students will:

- Understand basic welding principles and techniques.
- Learn to operate welding equipment safely and effectively.
- Gain experience in various welding processes such as MIG, TIG, and Stick welding.
- Complete practical projects related to agricultural equipment and structures.

Required Materials (Will be provided)

- Textbook: Introduction to Agricultural Welding
- Welding helmet (with proper filters)
- Work gloves
- Safety boots
- Welding jacket or apron
- Safety glasses/goggles

• Notebook and pens/pencils

Note: Students will be assigned a personal locker in the ag shop to store their PPE and personal tools. Please ensure that all personal safety equipment is properly maintained and brought to each class. Students can bring their own personal lock for their lockers.

Classroom Rules

- 1. **Safety First:** Always wear the required Personal Protective Equipment (PPE) during welding activities. Follow all safety guidelines and instructions.
- 2. **Respect:** Respect all equipment, materials, and fellow students. Properly clean and store tools and materials after use.
- 3. **Punctuality:** Arrive on time and be prepared for each class. This includes having all necessary PPE and materials.
- 4. **Participation:** Engage actively in class activities and discussions. Complete all assignments and projects to the best of your ability.
- 5. **Cleanliness:** Maintain a clean and organized workspace. Dispose of waste materials properly and keep personal lockers tidy.

Warning

This course involves activities that include working with hot metals, flames, and sharp tools. It is crucial to follow all safety procedures and always wear the appropriate PPE to prevent accidents and injuries. If you have any concerns regarding these activities or if you require special accommodation, please discuss them with the instructor before signing this syllabus.

Semester Schedule

Week 1-2: Introduction to Welding Safety and Equipment

- Overview of welding safety procedures
- Introduction to welding equipment and tools

Week 3-4: Basic Welding Techniques

- Introduction to MIG, TIG, and Stick welding processes
- Hands-on practice with basic welds

Week 5-6: Advanced Welding Techniques

- Techniques for welding various materials
- Practice on complex welds and joint configurations

Week 7-8: Welding Projects

- Project planning and design
- Start of individual or group welding projects

Week 9-10: Repair and Maintenance

- Techniques for repairing agricultural equipment
- Hands-on repair projects

Week 11-13: Final Projects and Evaluations

- Completion of final projects
- Evaluation and troubleshooting of welding work

Week 14-15: Review and Final Exam

- Review of key concepts and techniques
- Final exam and project presentations

Week 16: Course Wrap-Up and Feedback

- Course review and feedback session
- Cleanup of personal lockers and workspace

Grading Criteria

- Participation and Attendance: 20%
- Homework and Assignments: 25%
- Lab Work and Practical Projects: 30%
- Midterm Exam: 15%
- Final Exam/Project: 10%

Parent and Student Acknowledgment

By signing below, you acknowledge that you have read and understood the syllabus, including the warning about working with hot metals, flames, and sharp items. You also agree to adhere to all safety protocols and use the assigned personal locker.

Parent/Guardian Signatu	ıre:	 	
Date:			
Student Signature:		 	
Date:			

If you have any questions or concerns, please feel free to contact me. Looking forward to a productive and safe semester in Agricultural Welding!