

# Exploratory Agriculture Class Syllabus

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**Course Title:** Exploratory Agriculture

**Instructor:** Ms. Audrianna Bruce

**Contact Information:** abruce@troyusd.org

**Class Time:** 2:37 PM – 3:25 PM

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## Course Description

Welcome to Exploratory Agriculture! This class provides a broad overview of various agricultural disciplines, including welding, plant and soil science, and food science. Students will gain hands-on experience in each of these areas, learning fundamental concepts and skills through practical activities and projects.

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## Course Objectives

By the end of this course, students will:

- Explore different fields within agriculture, including welding, plant and soil science, and food science.
  - Gain practical skills and knowledge in each area through hands-on projects and activities.
  - Develop an understanding of the safety protocols and procedures required for working with various materials and equipment.
  - Engage in projects that integrate learning from all areas covered in the course.
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## Required Materials (Will be provided)

- Textbook: *Exploratory Agriculture: An Introduction*
- Notebook and pens/pencils
- Safety goggles
- Apron (for food science activities)

- Work gloves (for welding activities)
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## Classroom Rules

1. **Safety First:** Always follow safety guidelines specific to each activity. Wear the appropriate Personal Protective Equipment (PPE) as required for welding, plant and soil science, and food science.
  2. **Respect:** Show respect for all equipment, materials, and fellow students. Clean up after yourself and maintain a tidy workspace.
  3. **Punctuality:** Arrive on time and be prepared for each class, including having all necessary materials and PPE.
  4. **Participation:** Engage actively in class discussions, projects, and activities. Complete all assignments and projects to the best of your ability.
  5. **Communication:** Notify the instructor in advance if you will be absent or have any issues related to the course.
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## Warning

This course involves activities where you will handle a variety of materials and equipment.

- **Welding:** Activities will include working with hot metals, flames, and sharp items. Proper PPE, such as welding helmets and gloves, must be always worn.
- **Plant and Soil Science:** Activities will involve exposure to fertilizers, chemicals, and different types of plants. Follow all safety procedures and inform the instructor of any allergies or sensitivities.
- **Food Science:** Activities will include handling various foods and using hot plates and griddles. Follow all safety guidelines to prevent burns and injuries and inform the instructor of any food allergies or dietary restrictions.

Always adhere to the safety protocols provided to ensure a safe and productive learning environment.

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## Semester Schedule

### Week 1-2: Introduction to Exploratory Agriculture

- Overview of the course and its components
- Introduction to basic safety procedures and equipment

### **Week 3-4: Welding Fundamentals**

- Introduction to welding techniques and safety
- Hands-on practice with welding equipment and materials

### **Week 5-6: Plant and Soil Science Basics**

- Study of soil properties, plant biology, and fertilizer application
- Hands-on activities with soil testing and plant care

### **Week 7-8: Food Science Principles**

- Introduction to food safety, nutrition, and cooking techniques
- Hands-on practice with food preparation and cooking

### **Week 9-10: Integrated Projects**

- Projects that combine elements from welding, plant and soil science, and food science
- Application of skills and knowledge in practical scenarios

### **Week 11-12: Advanced Techniques and Problem Solving**

- Advanced techniques in each discipline
- Problem-solving and troubleshooting in practical activities

### **Week 13-14: Final Projects and Presentations**

- Completion of final projects that integrate learning from all areas
- Presentation of projects and peer reviews

### **Week 15: Review and Preparation for Final Exam**

- Review of key concepts and skills from the course
- Preparation for final exam

### **Week 16: Final Exam and Course Wrap-Up**

- Final exam

- Course review and feedback
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### **Grading Criteria**

- **Participation and Attendance:** 20%
  - **Homework and Assignments:** 25%
  - **Lab Work and Projects:** 30%
  - **Midterm Exam:** 15%
  - **Final Exam/Project:** 10%
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### **Parent and Student Acknowledgment**

By signing below, you acknowledge that you have read and understood the syllabus, including the warning about the various safety aspects and activities involved. You agree to adhere to all safety protocols and inform the instructor of any allergies, sensitivities, or special requirements.

**Parent/Guardian Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Student Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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If you have any questions or need further information, please feel free to contact me.  
Looking forward to a rewarding and engaging semester in Exploratory Agriculture!

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