



Steeleville High School Agriculture Department
Agricultural Construction & Technology
7th Period



Course Syllabus

Instructor: Mrs. McKinnies

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Pre Requisite: Basic Agriculture Mechanics

Level: 11th & 12th

Credit: .5 Credits (One Semester)

Agricultural Construction & Technology is a course that examines current construction practices and techniques in the agricultural and mechanical industry. Agricultural Construction & Technology prepares students for careers and continuing education in construction and technical fields. Therefore, the course is designed for upper level students and/or students who have completed Introduction to the Agricultural Industry or Basic Agricultural Mechanics. This course is one semester in length and upon successful completion of this course with a D or higher, .5 graduation credit will be awarded.

Course Description

Agricultural Construction & Technology is an advanced course that focuses on the knowledge, hands-on skills, and workplace skills applicable to the construction, agricultural, and mechanical industry. Course clusters include planning construction systems, masonry systems, construction systems, plumbing systems, paints & finishers, and greenhouse construction. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Course Objectives/Goals

- Students will develop and utilize skills needed to for career pathways in construction and agricultural mechanics.
- Students will be able to accurately plan and design diagrams for agricultural and residential structures.
- Students will demonstrate personal safety while working in the shop.
- Students will apply learned knowledge of carpentry through construction of small-scale agricultural/residential structures.
- Students will explain and build small-scale agricultural plumbing systems.
- Students will explain and build small-scale agricultural electrical systems.
- Students will demonstrate masonry skills through concrete and block layering exercises.
- Students will explore the drywall and painting industry.
- Students will understand basic greenhouse construction methods and materials.

Student Expectations

It is important that students in this class keep an open mind and respect the differences in student ability, backgrounds and beliefs. All students are expected to come to class prepared and participate on a daily basis. Students will be expected to follow all rules listed and described in the Steeleville High School Student Handbook. It is expected that students wear appropriate attire (safety glasses, closed-toe shoes, protective clothing, etc.) during shop work. Students will be expected to arrive daily with a writing utensil, notepad and calculator.

Online Learning Expectations for Students Choosing to Remote Learn

- Students are required to sign in daily and participate in classes from 8:13 – 2:30 p.m.
- Teachers will be engaging with in-person students as well as remote learners throughout the day.
- Daily/hourly attendance will be taken and if a student does not sign in and participate he/she will be counted absent and fall under attendance guidelines as outlined in the handbook.
- Parents must be available to communicate with administration and teachers via email or telephone; this is on an as-needed basis.
- Teachers are expected to use Google Meets to livestream their classes with the camera not facing students

Students Quarantined

- Students will participate in remote learning if medically able
- Paper copies will be sent home as needed
- Students that do not have tools at home will be give written assignments to received points for class.

Teaching Methods

Agricultural Mechanics and Technology is a course taught through a wide variety of teaching methods, but with a dominant focus through hands-on learning. Students will learn through class lecture, small group discussion, class debate, laboratory exercises, video, readings, independent study, games, individual and group projects, and more.

Assessments

Students will be assessed through regular completion of homework, projects, class participation, and labs. Quizzes will assess students throughout each unit and a test will be given upon completion of each unit.

Grading Policy

Assignments will vary in points.

The school's standard grading scale will be used in the class

A	89.5% - 100%	B	79.5 – 89.4%	C	69.5% - 79.4%
D	59.5% - 69.4%	F	<59.4%		

Missed/Late Work

Late homework assignments will automatically be dropped 25%, unless prior arrangements have been made or the missed assignment was due to an excused

absence. Missed quizzes or tests due to an unexcused absence will result in a zero. Make-up dates will be allowed for all quizzes and tests missed due to an excused absence.

Academic Honesty

Academic integrity is a vital component for individual success within Steeleville's Agriculture Department. Plagiarism and cheating by any student will result in a zero for the grade of the assignment and will follow punishment described in the student handbooks.

Text

A variety of text material will be given in this course. The primary text material will be MyCaert Agriculture Education State Curriculum readings. Text material will also include, but is not limited to, various textbook chapters, newspaper clippings, pamphlets, Internet articles, news articles, and short narrative briefs.

Semester One: Construction and Technology	
Unit 1: What is Agriculture? First 2-3 Days of School	
Module 1	Opportunities in FFA
Module 2	Achievement in FFA
Module 3	SAE's: Types, Keeping Records, and Implementing
Unit 2: Introduction to Mechanics and Technology- One Weeks (REVIEW)	
Module 4	Identifying Areas of Ag. Mechanics
Module 5	Exploring Careers in Ag. Mechanics
Module 6	Identifying Hazards in Agricultural Mechanics
Module 7	Personal Safety in Agricultural Mechanics
Unit 3: Mechanical Systems & Technology- One Week	
Module 8	Recognizing the Impact of Technological Advances in Ag. Mechanics
Module 9	The Future of Agricultural Mechanics & Technology
Unit 5: Individual Project #: Chest- Four Weeks	
Module 14	Tool ID- Refresher
Module 15	Shop Safety
Unit 6: Team Building Project: Construction - Five Weeks	
	Project #1: Picnic Tables
	Project #2: Builders Choice/ or Teachers Choice
Unit 7: Construction Systems - 7 Weeks	
Module	Framing, Roofing, Siding, and Insulating Agricultural Systems
Module	Plumbing: Understanding and Designing Systems
Module	Masonry Work: Concrete Mixing
Module	Paints, Finishers, and Preservatives
	Project #2: Cook Shed Rebuild/ Play House

*The order of units and modules are subject to change

Construction II- Independent Projects (Guidelines from Mrs. McKinnies)