

Construction Technology Course Outline/Syllabus

Instructor: Mr. James Henderson Kennedy High School

COURSE DESCRIPTION

Students have hands-on opportunities to learn all phases of basic residential construction, including carpentry, drywall, electrical, flooring, painting, plumbing, roofing, masonry, welding, and reading blueprints. During the first part of the course, students learn about construction safety, foundations, framing, and proper use of tools. Then students have the opportunity to make practical application of their classroom studies on a construction project. Projects may include building sawhorses, scale model houses, storage sheds, remodeling (on or off-site), simulated bathroom construction, and other projects (Play Houses) as available.

This competency-based course prepares students for entry-level positions in the construction industry. Integrated throughout the course are career technical education standards which include basic academic skills, communication, career planning, technology, problem solving, safety, responsibility, ethics, teamwork, and technical knowledge.

STUDENT PERFORMANCE OBJECTIVES

Upon successful completion of the course, students will:

- 1) Understand and apply measurement systems in the planning and layout process used in the residential construction industry.
- 2) Demonstrate the safe and appropriate use of hand tools common to the construction industry, such as hammers, torches, pliers, wire cutters, pipe cutters, saws, chisels, and wrenches
- 3) Demonstrate safe and appropriate use of power tools common to the construction industry, such as band saw, saber saw, miter compound saw, radial arm saw, table saw, jig saw, cut-off saw, reciprocating saw, portable drill, drill press, planer, roto hammer, router, jointer, belt sander, and finishing sanders
- 4) Practice occupational safety on the construction site, whether classroom or job site
- 5) Demonstrate competency in the mathematics used in measuring and estimating the materials needed for a job
- 6) Demonstrate communication, teamwork, and leadership skills in project development
- 7) Demonstrate familiarity with skills in the following areas: carpentry, electrical wiring, plumbing, masonry, plastering
- 8) Identify different building materials and types of wood used in construction
- 9) Understand the process of building layout, foundations, and framing
- 10) Understand the career pathways available in the construction trades, including further training and apprenticeship opportunities

Power tools

Wall and ceiling framing

Electrical wiring

Plumbing systems

METHODS, STRATEGIES AND TECHNIQUES

A variety of strategies and techniques are used to instruct the students, including:

Direct

injury, and the teacher/instructor is there to inform how to stay safe. So please listen to your teacher/instructor instructions and directions. Failure to help clean shop will lead to an F grade or the lowering of your grade for course.

Student Work Skills and Finish Work

60% of student's grade is finished projects if applicable to that quarter grading. Grading Rubric will be supplied before shop work begins.

Grading Percentage

100%	-90%	A
89%	-80%	B
79%	-70%	C
69%	-60%	D
59%-Lower		F