

Elective Course Description

Course Name	Construction and Building Skills Level 2
Course Number	TBD
Length of Course	40 Hours
Grade Level	9-12
Credit Type	0.25 Elective Per Semester
Grading Scale	A-F
Course Prerequisite	N/A - However students who have taken the one week intensive Intro to Construction are urged to participate.
Course Summary	This hands-on course introduces high school students to fundamental construction skills and building trades. Students will gain practical experience with basic construction techniques, tool safety, and project planning while developing valuable skills for both personal use and potential career paths in the construction industry.
Primary Materials	<p>Students will work with industry-standard tools and materials including:</p> <ul style="list-style-type: none"> - Hand tools (hammers, saws, levels, measuring tapes) - Power tools (drills, circular saws under supervision) - Construction materials (lumber, fasteners, sheathing materials) - Safety equipment (safety glasses, work gloves, ear protection)

<p>Standards</p>	<p>Learning Objectives By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> - Demonstrate proper safety protocols and tool handling techniques - Read and interpret basic construction drawings and measurements - Understand wall framing principles and layout techniques - Install exterior wall sheathing according to building codes - Complete a small-scale construction project from planning to finish
<p>Assessment</p>	<p>Students will be evaluated based on:</p> <ul style="list-style-type: none"> - Active participation and safety compliance - Skill demonstration and project completion - Understanding of construction concepts - Teamwork and communication abilities

<h2 style="text-align: center; background-color: black; color: white; padding: 5px;">Activities</h2>	
<p>Day 1</p>	<p>Safety and Tool Fundamentals</p> <ul style="list-style-type: none"> - Construction site safety orientation - Personal protective equipment (PPE) training - Introduction to hand and power tools - Basic measuring and marking techniques
<p>Day 2</p>	<p>Project Planning and Materials</p> <ul style="list-style-type: none"> - Reading construction plans - Material selection and estimation - Basic math for construction - Project layout and marking

<p>Day 3 - 4</p>	<p>Wall Framing Fundamentals</p> <ul style="list-style-type: none"> - Understanding wall framing terminology - Layout techniques for wall plates - Stud spacing and placement - Door and window rough opening requirements - Header sizing and installation
<p>Day 5 - 6</p>	<p>Exterior Sheathing</p> <ul style="list-style-type: none"> - Types of exterior sheathing materials - Proper installation techniques - Nailing patterns and fastener requirements - Weather barrier integration basics - Building code requirements for sheathing
<p>Day 7 - 8</p>	<p>Project Completion</p> <ul style="list-style-type: none"> - Final project construction - Quality control and inspection - Project presentation - Career pathways in construction
	<p>Safety Note</p> <p>Safety is paramount in this course. Students must follow all safety protocols and wear appropriate PPE at all times. Parent/guardian consent is required for participation.</p>