**Eddyville Charter School CAREER AND TECHNICAL EDUCATION**

 **Spring Semester**

**SYLLABUS**

**COURSE TITLE: Construction** ½ Credit each semester

**Instructor Phone # Email**

Greg Wood 541-875-2942 greg.wood@lincoln.k12.or.us

**Course Description**

Construction is an instructional program that teaches individuals necessary skills that will used for employment in the building trades. Construction is a basic course teaching fundamentals of safety, tools, math, and basic carpentry.

**Prerequisites:** No Prerequisite

**Recommended Tools, Equipment and Supplies:**

Calculator, pencils, paper & shop binder

**General Course Objectives**

Upon completing this course you will be able to:

* Demonstrate shop/construction safety precaution and awareness.
* Demonstrate knowledge of construction hand and power tools names and use
* Demonstrate competency in basic math procedure related to construction
* Demonstrate ability to read and interpret blue prints.
* Communicate effectively in different on the job situations.
* Demonstrate critical thinking and problem solving skills.
* Demonstrate effective relationship skills with peers and teachers.
* Identify construction materials and describe their uses.
* Demonstrate ability to layout, determine cost, and build wood project.

**Methods of Instruction**

Lecture, Discussion, Lab, Peer Coaching, Demonstrations and various innovative in-class activities

**Grading**

Your grade is based on timely and accurate completion of class assignments, performance on verbal and written evaluations, and the final exam.

Notebook 20%

Safety Tests 10%

Class Projects 60%

Final Exam 10%

**Outline by Major Topics**

**Safety**

* General Safety
* Personal Safety
* Machine Safety

**Hand Tools**

* Categories
* Identification
* Safe operation

**Machines**

* Identification
* Set up and Safe Operation

**Interpreting Drawings**

* Sketching
* Blue Prints
* Scale
* Materials and Cut Lists
* Legends
* Symbols

**Basic Math**

* Addition
* Subtraction
* Multiplication
* Division
* Fractions
* Converting Fractions to Decimal
* Converting Decimals to Fractions
* Formulas
* Measurement

**Specific Secondary Wood Topics**

* Planning & Design
* How to Select and Identify Materials
* Wood Technology
* Framing components
* Assembly Techniques & Mechanical Fasteners
* Man Made Materials
* Tool/Machine Selection & Care
* Trade Vocabulary
* Trade Occupations