Elizabethtown Area School District
Scope & Sequence - Quick Reference

Department: Applied Engineering & Technology Education, 18 Weeks

Course: Building Trades Pre-Apprenticeship

Grade Level(s): 11-12

Note: This course is based on the NCCER CORE Curriculum.

Unit Title	*General Topic(s)*	*Pacing*
1. Build Your Future in Construction	• The history of construction • Outlooks for construction jobs • Benefits of a career in construction • Typical career progression for craft professionals • Different careers available and the skills they require • How to pursue a construction career through career and technical education, craft training and apprenticeships, and community colleges and universities.	1 Week
2. Basic Safety (Construction Site Safety Orientation)	• Importance of safety in the construction and industrial crafts • How to identify and follow safe work practices and procedures • How to properly inspect and use safety equipment.	2 Weeks

	● Safety practices associated with elevated work; energy release; and various hazards encountered on job sites. ● Performance Profiles ○ Ladder Setup ○ PPE Inspection ○ PPE don, fit, remove ○ Power Cord and GFCI Inspection	
3. Introduction to Construction Math	● Basic math skills needed in the construction environment. ● Whole numbers and fractions; working with decimals; the four primary math operations; reading rulers and tape measures; the inch-pound and metric units of measurement; basic geometric figures; and area and volume calculations for two-dimensional and three-dimensional objects. ● Performance Profiles ○ Measure pieces of lumber ○ Measure a room ○ Measure short inside dimension ○ Add measurements that include fractions	2 Weeks
4. Introduction to Hand Tools	● Identification, use, and care of hand tools ● Properly choose and safely use hand tool ● Performance Profiles	2 Weeks

	○ Demonstrate proper use of a variety of hand tools.	
5. Introduction to Power Tools	● Power tools used by construction workers ● Safe usage and typical maintenance requirements of power tools ● Performance Profiles ○ Safely and properly demonstrate the use of a variety of power tools	2 Weeks
6. Introduction to Construction Drawings	● Information and skills needed to read and understand construction drawings ● Performance Profiles ○ Locate information and measurements in a set of construction drawings	1.5 Weeks
7. Introduction to Basic Rigging	● Types of rigging slings and hardware and how those items are used. ● How to properly inspect slings and hardware items. ● Different types of hoists used in rigging ● Common rigging hitches ● How to make the Emergency Stop hand signal. ● Performance Profiles ○ Hand Signals ○ Sling inspection and load capacity	2 Weeks

8. Basic Communication Skills	● Information and skills needed to communicate effectively and clearly ● Performance Profiles ○ Perform a task after being given verbal instructions ○ Fill-out a work related form ○ Read and interpret a set of instructions for wearing and fitting a fall arrest harness	1 Week
9. Basic Employability Skills	● Finding and securing a position in the construction trades. ● Problem-solving ● Effective interaction with others	1 Week
10. Introduction to Material Handling	● Safety guidelines for workers handling materials on the job site ● Procedures and techniques to use when lifting, stacking, transporting, and unloading materials ● Basic motorized and non-motorized material handling equipment commonly found in the construction environment ● Performance Profile ○ Safe Manual Lifting Techniques ○ Tying Common Knots	1.5 Weeks
11. OSHA 10-Hour	● Module 1: Introduction to OSHA	2 Weeks

	● Module 2: OSHA Focus Four Hazards ● Module 3: Personal Protective Equipment ● Module 4: Health Hazards in Construction ● Module 5: Stairways and Ladders ● Module 6: Cranes, Derricks, Hoists, Elevators and Conveyors ● Module 7: Excavations ● Module 8: Materials Handling, Use and Disposal ● Module 9: Scaffolds ● Module 10: Tools - Hand and Power	