

Standards and Competencies for Carpentry I (Course # 5731)

	Begin-End Yr
Standard 1 - Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.	2009 -
1.1 - Cultivate leadership skills.	2009 -
1.2 - Participate in SkillsUSA as an integral part of instruction.	2009 -
1.3 - Assess situations within the school, community, and workplace and apply values to develop and select solutions.	2009 -
1.4 - Demonstrate the ability to work cooperatively with others.	2009 -
1.5 - Exhibit integrity and pride in artisanship.	2009 -
Standard 2 - Students will assume responsibility for the safety of themselves, their coworkers, and bystanders.	2009 -
2.1 - Develop a positive attitude regarding safety practices and issues.	2009 -
2.2 - Use and inspect personal protective equipment.	2009 -
2.3 - Inspect, maintain, and employ safe operating procedures with tools and equipment, such as hand and power tools, ladders, scaffolding, and lifting equipment.	2009 -
2.4 - Demonstrate continuous awareness of potential hazards to self and others	2009 -
2.5 - Comprehend personal responsibilities under HazCom (Hazard Communication) regulations.	2009 -
2.6 - Comprehend personal responsibilities, regulations, and company policies to protect coworkers and bystanders from hazards.	2009 -
2.7 - Comprehend personal responsibilities, regulations, and company policies regarding reporting of accidents and observed hazards and regarding emergency response procedures.	2009 -
2.8 - Demonstrate appropriate construction-related safety procedures	2009 -
2.9 - Pass with 100 percent accuracy a written examination relating to safety issues	2009 -
2.10 - Pass with 100percent accuracy a performance examination relating to safety	2009 -
2.11 - Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.	2009 -
Standard 3 - Students will interpret, lay out, and fabricate in conformance to construction drawings and written specifications.	2009 -
3.1 - Interpret dimensions and locations of components that are explicitly dimensioned in construction drawings and written specifications.	2009 -
3.2 - Interpret plan and elevation views shown in construction drawings.	2009 -
3.3 - Recognize and correctly interpret lines and symbols commonly used in construction drawings.	2009 -
3.4 - Make layouts of locations and elevations of structural elements with special requirements.	2009 -
Standard 4 - Students will identify and select typical wood building materials and fasteners.	2009 -
4.1 - Distinguish between and select various types, cuts, and grades of dimensioned lumber.	2009 -
4.2 - Distinguish between and select various types, cuts, and grades of manufactured and engineered wood products.	2009 -
4.3 - Distinguish between and select uses for various types and sizes of nails, bolts, and screws.	2009 -
Standard 5 - Students will use appropriate hand and power tools to safely achieve industry accepted results.	2009 -
5.1 - Identify hand tools, portable power tools, and stationary power tools.	2009 -
5.2 - Explain the safe operation of hand tools, portable power tools, and stationary power tools.	2009 -
5.3 - Demonstrate proper use of hand tools, portable power tools, and stationary power tools.	2009 -
Standard 6 - Students will construct forms; install reinforcement; and place, finish, and cure concrete in accordance with construction drawings and specifications.	2009 -
6.1 - Distinguish various types of concrete based on composition and intended use.	2009 -
6.2 - Determine type and calculate the volume of concrete required by construction drawings and specifications	2009 -
6.3 - Defend the need for and appreciate the importance of accurate placement of reinforcing components in concrete.	2009 -
6.4 - Perform slump tests in accordance with typical industry practice.	2009 -
6.5 - Demonstrate knowledge of processes typically used to place and consolidate concrete.	2009 -
6.6 - Demonstrate basic concrete finishing and curing.	2009 -
Standard 7 - Students will compare and contrast post-and-beam structures, platform structures, load-bearing walls, panel walls, and curtain walls.	2009 -
7.1 - Distinguish between post-and-beam and platform structures whether executed in wood or steel	2009 -
7.2 - Plan the proper sequence of assembly for a multi-story post-and-beam structure	2009 -
7.3 - Plan the proper sequence of assembly for a multi-story platform structure	2009 -
7.4 - Analyze structural differences between load-bearing, panel, and curtain walls.	2009 -
Standard 8 - Students will compare and contrast dimensioned lumber, engineered shapes, and trussed structures for load-bearing span applications.	2009 -
8.1 - Distinguish between dimensioned lumber, engineered shapes, and fabricated trusses	2009 -
8.2 - Compare and contrast dimensioned lumber, engineered shapes, and fabricated trusses for load-bearing span applications.	2009 -
Standard 9 - Students will demonstrate the importance of bridging and diagonal bracing of floor and wall structures.	2009 -
9.1 - Demonstrate the necessity for bridge bracing between primary structural elements	2009 -
9.2 - Demonstrate the necessity for diagonal bracing in wall structures.	2009 -
9.3 - Demonstrate the necessity for fire stop walls between primary structural elements	2009 -