Course Number: ARCO-0216
OHLAP Credit: No
OCAS Code: None
Course Length: 15 Hours
Career Cluster: Architecture and Construction
Career Pathway: Maintenance/Operations
Career Major(s): Maintenance/Repair Carpenter, Structural Carpenter

Pre-requisite(s):
This is an introduction to building materials used in construction. This includes lumber, sheet materials, engineered wood products, structural concrete, and structural steel.

Textbooks/Materials:
Lemley Campus:

Sand Springs Campus:

Course Objectives:
A. Explain the terms commonly used in discussing wood and lumber.¹
B. Demonstrate an understanding of lumber products used in carpentry.
   1. State the uses of various types of hardwoods and softwoods.¹
   2. Identify various types of imperfections that are found in lumber.¹
   3. Explain how lumber is graded.¹
   4. Interpret grade markings on lumber and plywood.¹
   5. Explain how plywood is manufactured, graded, and used.¹
   6. Identify various types of building boards and identify their uses.¹
   7. Identify the uses of and safety precautions associated with pressure-treated and fire retardant lumber.¹
   8. Describe the proper method of caring for lumber and wood building materials at the job site.¹
   9. State the uses of various types of engineered lumber.¹
   10. Calculate the quantities of lumber and wood products using industry-standard methods.¹
C. Demonstrate an understanding of Fasteners
   1. List the basic nail and staple types and their uses.¹
   2. List the basic types of screws and their uses.¹
   3. Identify the different types of anchors and their uses.¹
D. Describe the common types of adhesives used in construction work and explain their uses.¹

¹ Carpentry Competency Skills, National Center for Construction Education and Research
Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
   2. Each course must be passed with seventy (70%) percent or better.
   3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.