INTRODUCTION TO MASONRY
Course Syllabus

Course Number: ARCO-0657
OCAS Code: None
Course Length: 45 Hours
Career Cluster: Architecture & Construction
Career Pathway: Construction
Career Major(s): Masonry

Pre-requisite(s):
This course is an introduction to the history of masonry and current materials and processes used in the masonry industry, safety, uses of brick and blocks, mortar mixing techniques, and laying masonry units.

Textbooks:
- Brick and Block Masonry by Curriculum and Instructional Materials Center, Oklahoma Department of Career Tech (1999)
- Fundamentals of Bricklaying by Curriculum and Instructional Materials Center, Oklahoma Department of Career Tech (1999)

Course Objectives:

A. Complete an Introduction to the Field of Masonry.
   1. Discuss the history of masonry.¹²
   2. Describe modern masonry materials and methods.¹²
   3. Explain career ladders and advancement possibilities in masonry work.¹²
   4. Describe the skills, attitudes, and abilities needed to work as a mason.¹²

B. Perform Basic Safety.
   1. Identify the responsibilities and personal characteristics of a professional craftsperson.¹
   2. Explain the role that safety plays in the construction crafts.¹²
   3. Describe what job-site safety means.¹²
   4. Explain the appropriate safety precautions around common job-site hazards.¹²
   5. Demonstrate the use and care of appropriate personal protective equipment.¹²
      a. Hard hat¹
      b. Safety glasses¹
      c. Ear protection¹
      d. Clothing, jewelry, footwear¹
      e. Dust masks¹
      f. Steel toed boots¹
   6. Follow safe procedures for lifting heavy objects.¹²
      a. Apply ergonomics¹
   7. Describe safe behavior on and around ladders and scaffolds.¹²
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8. Describe and demonstrate knowledge of the Occupational Safety and Health Act (OSHA).¹
   a. HazCom and MSDS¹
   b. bloodborne pathogens¹
9. Describe fire prevention and fire fighting techniques.¹ ²
10. Define safe work procedures around electrical hazards.¹ ²
11. State the safety precautions that must be practiced at a work site, including the following:²
   a. Safety practices²
   b. Fall-protection procedures²
   c. Forklift-safety operations²
12. Put on eye protection, respiratory protection, and a safety harness.²

C. Demonstrate Processes Used in Masonry.
1. Perform the following basic bricklaying procedures:¹ ²
   a. Mixing of mortar¹ ²
   b. Laying a mortar bed¹ ²
   c. Laying bricks¹ ²
2. Use the correct procedures for fueling and starting a gasoline-powered tool.¹ ²

¹ ODCTE objective
² NCCER objective

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.