SITE LAYOUT ONE – DISTANCE MEASUREMENT & LEVELING
Course Syllabus

Course Number: CNST-0900
OCAS Code: None
Course Length: 30 Hours
Career Cluster: Architecture & Construction
Career Pathway: Construction
Career Major(s): Carpentry and Masonry

Pre-requisite(s):
Course Description: This course is an introduction to the principles, equipment, and methods used to perform distance measurement and differential leveling, layout responsibilities of surveyors, field engineers and carpenters, understanding and using site/plot drawings, and methods used for on-site communications.

Textbooks: Site Layout One – Distance Measurement & Leveling

Course Objectives:
A. Describe the major responsibilities of the carpenter relative to site layout.
B. Demonstrate an Understanding of the Principles of Site Layout.

1. Convert measurements stated in feet and inches to equivalent measurements stated in decimal feet, and vice versa.
2. Use and properly maintain tools and equipment associated with taping.
3. Use taping and/or chaining equipment and procedures to make distance measurements and perform site layout tasks.
4. Determine approximate distances by pacing.
5. Recognize, use, and properly care for tools and equipment associated with differential leveling.
6. Use a builder's level or transit and differential leveling procedures to determine site and building elevations.
7. Record site layout data and information in field notes using accepted practices.
8. Check and/or establish 90° angles using the 3/4/5 rule.

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.

1 Carpentry Advanced Level Four, Competency Skills, National Center for Construction Education and Research (NCCER)
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.