

COURSE SYLLABUS
SOUTHEAST MISSOURI STATE UNIVERSITY

Department of Industrial Engineering Technology

Course No.: CM-343

Title of Course: Construction Surveying and Testing

Revision: _____

New: X

Email:

Office Phone:

Instructor:

Office:

Web URL:

I. Catalog Description and Credit Hours of Course:

A continuation of the study of, materials, procedures, and processes utilized in construction as well as land surveying and testing of materials and soils for residential and commercial construction applications. 3 credit hours. (2 hours lecture and 2 hours lab)

II. Prerequisites:

CM-243, TG-226

III. Purposes or Objectives of the Course:

Upon the successful completion of the course, the student will be able to:

- A. Identify and read architectural drawings effectively.
- B. Identify and integrate different types of construction materials into building systems
- C. Apply engineering principles in materials selection, design, and safety.
- D. Read and interpret information regarding land selection, surveying, and layout of construction site.
- E. Determine appropriate or required tests for various materials and processes required for a construction project

IV. Expectations of Students:

- A. Read and study all assignments.
- B. Class attendance and participation are required, both lecture and lab
- C. Complete and turn in assignments at the scheduled time
- D. In a professional environment, work areas are kept clean. In keeping with a professional attitude towards fellow students, always clean your area before leaving
- E. All laboratory work must be completed during the regularly scheduled lab time

V. Course Content or Outline:

- A. Site Preparation and Layout 3 weeks
- B. Surveying 3 weeks
 - 1. Introduction to surveying equipment
 - 2. Surveying techniques
 - a. Boundary surveys
 - b. Project layout
 - c. Dimensional controls

- C. Materials and Methods of Commercial Construction 3 weeks
- D. Materials Tests
 - 1. Soils
 - a. Moisture
 - b. Compaction
 - 2. Concrete
 - a. Slump
 - b. Air entrainment
 - c. Test Cylinders
 - 3. Masonry
 - a. Mortar cubes
 - 4. Welds
- E. Structural Design and Components 3 weeks
- F. Building Mechanical Systems 3 weeks
- G. Final Exam

VI. Textbook and Other Required Materials or Equipment:

- Lewis, G., & Vogt, F. (2001). Carpentry 3rd Ed. New York, Delmar Inc.
- Eye protection that meets current specifications of the American National Standards Institute (ANSI). Eye protection must be worn at all times that equipment and tools are being used by anyone.

VII. Student Evaluation:

Grading will consist of the following criteria and percentages.

Class Participation	10%
Assignments/Labs	40%
Quizzes/Tests	30%
Final/Final Project.....	20%

Grading Scale:

- A = 100 - 90%
- B = 89 - 80%
- C = 79 - 70%
- D = 69 - 60%
- F = 59 - 0%

NOTHING IS ACCEPTED LATE without appropriate reason such as illness, death in family etc. If unable to attend class, work may only be made up if prior arrangements have been made. Students must e-mail BEFORE class time with reason for missing. Assignments due at the beginning of the period (BOP) are not accepted later in the period. Assignments due at the end of the period (EOP) are not accepted after that time. Nothing is to be turned in to the department secretary. Tests or quizzes may or may not be announced ahead of time. Assignments turned in may be graded in whole, or in part as announced.

VIII. Disabilities Statement:

If student has special needs addressed by the Americans with Disabilities Act (ADA) and needs course materials in an alternative format, please notify Instructor immediately. Reasonable efforts will be made to accommodate special needs.

Instructor reserves the right to change the content and/or sequencing of the materials presented and will notify students of any changes