

COURSE SYLLABUS FORMAT
Southeast Missouri State University

Department of Industrial & Engineering Technology Course No. CM443
Title of Course: Construction Equipment Management Revision _____
_____ New X

I. Catalog Description and Credit Hours of Course:

Study of the basic principles, practices and techniques used in the construction industry for selecting and managing construction equipment. 3 Credit Hours

II. Prerequisite(s):

CM320 and CM343

III. Purposes or Objectives of the Course:

- A. Become familiar with the types of construction equipment and their capabilities.
- B. Understand the basic principles and terminology of project management and construction methods.
- C. Understand the basics of materials handling and rigging.

IV. Student Learning Outcomes (Minimum of 3)

- A. Students will be able to calculate cycle times for various types of equipment.
- B. Students will be able to calculate production rates for various types of equipment.
- C. Students will be able to estimate costs for various types of equipment.

V. Expectations of Students:

- A. Complete assignments in a timely fashion
- B. Attend field trips

VI. Course Content or Outline (Indicate number of class hours per unit or section):

- A. Equipment Economics 6 hours
 - Introduction to Construction Equipment
 - Time Value of Money, Rate of Return, Break-Even Analysis, etc.
- B. Fundamentals of Earthwork 15 hours
 - Planning for Earthwork Construction
 - Soil and Rock
 - Compaction and Stabilization Equipment
 - Dozers
 - Scrapers
 - Excavators
 - Trucks and Hauling Equipment
 - Finishing Equipment
 - Drilling Rock and Earth
- C. Materials Production 6 hours
 - Blasting Rock
 - Aggregate Production
 - Asphalt Mix Production and Placement

Concrete and Concrete Equipment	
D. Erection, Hoisting and Rigging	12 hours
Cranes	
Piles and Pile-Driving Equipment	
Rigging	
E. Auxiliary Equipment	6 hours
Air Compressors and Pumps	
Welders	
Light Plants	

VII. Textbook(s) and/or Other Required Materials or Equipment:

- A. *Construction Planning, Equipment, and Methods*, 8th Edition, Peurifoy, R., Schexnayder, C., Shapira, A. and Schmitt, R.

VIII. Basis for Student Evaluation

A. Homework	35%
B. Quizzes (3)	30%
C. Team Project	10%
D. Final Exam	20%
E. Class Participation	5%

Course grade will be based on the following Grading Scale:

Grade	At least	Less than
A =	90.0%	
B =	80.0%	90.0%
C =	70.0%	80.0%
D =	60.0%	70.0%
F =		60.0%

IX. Academic Policy Statement:

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Academic honesty is defined as “Engaging or knowingly assisting in academic dishonesty; including plagiarism, cheating, and those acts which would deceive, cheat, or defraud so as to promote or enhance one’s scholastic record.” Refer to the following link for details: <http://www6.semo.edu/stuconduct/>.

X. Student with Disabilities Statement:

If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs. Refer to the following for details: <http://www.semo.edu/ds/>.