Course Prefix and Number: CIV 135                 Credits: 3

Course Title: Construction Management and Estimating

Course Description: Teaches the equipment and methods used in construction. Includes principles and economics of construction, planning and management, and principles of estimating primarily using highway and building project examples. Co-requisite MTH 115 or equivalent. Lecture 3 hours per week.

General Course Purpose: Course provides a foundation in the economics and management of civil engineering projects

Course Prerequisites and Co-requisites:
Co-requisite: MTH 115 or equivalent

Course Objectives:
Upon completing the course, the student will be able to
a. Apply earthmoving operations principles;
b. Apply fundamentals of excavating and lifting;
c. Apply loading and hauling performance data;
d. Apply principles of compacting and finishing;
e. Apply fundamentals of concrete and asphalt mixes;
f. Apply fundamentals of paving and surface treatment;
g. Apply methods of rock excavation;
h. Apply fundamentals of estimating, improving productivity and performance;
i. Apply types of foundations;
j. Apply methods of concrete construction and form design;
k. Apply principles of wood, steel, and masonry construction;
l. Determine job planning and management (CPM);
m. Apply fundamentals of construction economics, contracts, safety, and health; and
n. Apply fundamentals of estimating, improving productivity and performance.

Major Topics to Be Included:
a. Introduction  
b. Earthmoving and heavy construction  
c. Building construction  
d. Construction management  
e. Construction estimating

Effective Date of Course Content Summary: February, 2009