COURSE NUMBER       CET 233
COURSE NAME         STRUCTURAL ANALYSIS IN CONSTRUCTION
COURSE STRUCTURE    (3-0-3) (lecture hr/wk - lab hr/wk – course credits)
COURSE COORDINATOR  Prof. John Wiggins
COURSE DESCRIPTION  Study of types and behavior of modern structures using both analytical and intuitive techniques. Examples include beam and column, one- and two-way slab systems, wood and masonry systems.
PREREQUISITE(s)     Statics (MET 235 or equivalent) and Strength of Materials (MET 235 or equivalent).
COREQUISITE(s)      None
REQUIRED, ELECTIVE OR SELECTED ELECTIVE Required Course
COMPUTER USAGE      Word, Excel
COURSE LEARNING OUTCOMES (CLO) By the end of the course students should be able to:
1. Selecting appropriate construction materials and practices
2. Applying basic technical concepts to the solution of construction problems involving structures
3. Performing standard analysis and design in at least one recognized technical specialty appropriate to the program.
4. 
CLASS TOPICS       Structural Analysis and Strength of Materials Review, Design of various loads, Design of various wood components in a system, Design of various masonry components in a system
STUDENT OUTCOMES   The Course Learning Outcomes support the achievement of the following CET Program Outcomes and TAC of ABET Criterion 9 requirements
Outcome 1 An appropriate mastery of the knowledge, techniques, skills, and modern tools of the construction industry
Outcome 2 An ability to apply current construction knowledge, adapt emerging applications of mathematics, science, engineering and technology
Outcome 6 An ability to identify, analyze, and solve technical problems
Outcome 7 An ability to communicate effectively.