



**School of Applied Engineering and Technology
Department of Engineering Technology
Construction Engineering Technology Program
Course Syllabi**

Course Number and Name: CET 331, Structural Systems

Credits and Contact Hours: Credits - 3; Contact Hours – 3.0 Hour Lecture, once a week

Course Coordinator's Name: John A. Wiggins, P.E., Senior University Lecturer & Program Coordinator

Text Book and Supplemental Materials

Structural Wood Design: ASD/LFRD, 2nd Edition Abi Aghayere and Jason Vigil – Taylor & Francis/CRC Press, 2017 ISBN-13: 978-0-367-87562-6

Specific Course Information

Brief Description of the content of the course

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, and wind and seismic analysis.

Prerequisites or Co-requisites: CET 233 Structural Analysis in Construction

Course Status: Required Course

Specific Goals for the Course

Specific Outcomes of Instruction

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 goals of the program.

Relation to Student Outcomes

(1) an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;

(3) an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;

(4) an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and

g. selection of appropriate construction materials and practices;

Brief list of topics covered

Design of wood structures, analysis of live and dead loads including roof loads, wind loads and snow loads;