DESGN 310

Title: Graphic Analysis and Documentation

Units: 3.00

Prerequisite: DESGN 100 (Introduction to Computer Aided Drafting and Design (CADD)) with a grade of "C" or better

Advisory: DESGN 302 (Technical Documentation with CADD), AND ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better.

Hours: 36 hours lecture, 72 hours laboratory

Description: This course covers the application of orthographic projection and geometric construction principles as they are used to solve technical problems. Additionally, graphical analysis is used to determine strength, deflection, cost, volume, and green technology ratings. These analyses may utilize design characteristics such as forces, moments, ratios, and areas as well as distance, bearing, and grade. These characteristics are then used in the solution of engineering and architectural problems.

Learning Outcomes and Objectives

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

- solve for (graphically determine) the design characteristics of shapes used in architectural, engineering, and green technology disciplines
- analyze and present data in a meaningful graphical manner that allows for the solution of design problems
- solve technical problems from architectural, engineering, and green technology disciplines