ARC 5584, Structures 1, 3 credits.

Introduction to structural concepts and the principles of structural behavior. This course will cover statics and basic beam and column design.

Course Goals & Objectives:

Provide basic solutions to statics problems.
Understand and calculate basic section properties.
Understand and sketch shear and moment diagrams for beams and columns.
Provide preliminary section sizes.
Calculate basic stresses.

Student Performance Criterion/a addressed:

B.9 Structural Systems
Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Topical Outline:

Prerequisites:

Passing grade of “C” or higher in: Physics course with lab, Calculus (College Level) and Introduction to the Technology of Architecture.

Textbooks/Learning Resources:

Nawy, E. Design of Concrete Structures, current edition.

Offered:

Spring only; annually

Faculty assigned:

Thomas Beitelman (Adjunct)