

NUMBER AND TITLE OF COURSE:

ARC 6481 Design Development, 3 Credit Hours

COURSE DESCRIPTION:

Design Development. Summary course in the technology sequence in which construction, structural and environmental technology systems are integrated within architectural design projects. Emphasis is placed on the poetic as well as the technical aspects of building systems.

COURSE GOALS AND OBJECTIVES:

The intent of this course is to teach the skills necessary to proceed from a schematic design phase, consisting of those drawings illustrating a project's scale and relationship of components, to the design development phase, consisting of those drawings and other documents necessary to fix and describe the size and character of the project as architectural, structural, mechanical and electrical systems and materials.

Primary emphasis will be placed on the selection and dimensional interrelationship between building systems and their appropriateness, cost and code requirements. Further emphasis will be placed on the use of modules and their variables to resolve design problems, including horizontal and vertical coordination of all dimensions.

Secondary emphasis will be placed on the historical comparisons and precedents for similar design elements. This ability to understand the "how to" of construction is critical to the future practitioners place in the profession.

STUDENT PERFORMANCE CRITERION/ ADDRESSED:Understanding:

A.1, Professional Communication;
 B.6, Environmental Systems; B.7, Building Envelope; B.8 Building Material & Assemblies;
 B.9, Building Service Systems; B.10, Financial Considerations
 C.1, Research

Ability:

B.3, Codes and Regulations; B.4, Technical Documents; B.5, Structural Systems
 C.2, Integrated Evaluations and Decision Making-Design Process; C.3, Integrated Design

TOPICAL OUTLINE: See Course Schedule for outline + % of time on each subject

1. Project, Preliminary Submittal-	15%
2. Homework Assignments-	15%
3. Class Participation-	05%
4. Attendance-	05%
5. Final Project Submittal	60%
Total	100%

PREREQUISITES:

ARC 5470, Intro to Technology; ARC 5587, Structures 1; ARC 5588, Structures 2;
 ARC 5567, Materials & Methods of Construction; ARC 5689, Environmental Technology

TEXTBOOKS/LEARNING RESOURCES:

The Architect's Studio Companion Rules of Thumb For Preliminary Design,
 Edward Allen & Joseph Laro, Wiley and Sons

Building Construction Illustrated, Francis D. K. Ching, Wiley

OFFERED (SEMESTER AND YEAR):

Fall and Summer Semester

FACULTY ASSIGNED:

John J. McKenna (Adjunct Professor)