

The Catholic University of America
School of Architecture & Planning

ARCH 402/503: Comprehensive Building Design Studio (CBDS)

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6 credits
M, W, F - 1:00pm - 6:00 pm

Comprehensive Building Design Studio (CBDS)

Exploring the Integration of Building Systems, Materials, and Construction Methods into a Cohesive Whole

ASSIGNMENT #3: Conceptual Diagrams, Plans, Sections, Elevations

DEFINITION

CONCEPT

noun

1. a general notion or idea; conception.
2. an idea of something formed by mentally combining all its characteristics or particulars; a construct.
3. a directly conceived or intuited object of thought.

During the first few weeks, you have investigated many aspects pertaining to the Pre-Design Phase of the architectural design process including site, program, code, and zoning analysis. The information collected has been useful in clarifying the relevant parameters of this project more clearly. As you have developed your understanding of the project, a concept has begun to develop which (as the definition above states) has combined its characteristics or particulars into a construct.

Architects think visually. We communicate our intentions through representations including drawings, models (digital and physical), vignettes, etc. These representations are not only important for others to understand our work, but they are equally important as tools of communication about our own work; they foster development.

ASSIGNMENT

During this assignment, each firm will be asked to prepare Conceptual representations which capture the characteristics of each firm's project. These representations shall include all of the following:

- Models / Three Dimensional Representations (DIGITAL & PHYSICAL ARE REQUIRED!!!)
- Plans
- Sections
- Elevations

Although conceptual and diagrammatic in nature, these representations **MUST** be architecturally suggestive. This means that one can begin to understand the representations in architectural terms such as the following:

- transparent vs. opaque elements
- proportion - served vs. service spaces
- public vs. private
- load bearing vs. non-load bearing
- frame vs. infill
- zones (programmatic, circulation, etc)
- thick vs. thin elements
- solid vs. void

These representations should also begin to communicate / suggest how and where the various systems (Structural, Mechanical, Electrical, Plumbing) of the building are integrated and fold into the concept. These systems need not be determined entirely and specifically, rather, the representations should suggest where and how they influence the various components illustrated.

DUE: 25% Review
Monday, February 16

WORKPLAN

Gather all the information you have researched. Decide how sufficient and list all missing information. List issues critical from the information and establish meanings and patterns in the information.

Make a list of tasks you will need to properly gather, assess and document the information (information needed, sources to obtain it such as books or agencies, time needed to obtain it, tasks needed to document the information and time needed for each task). Rank the tasks in order of most critical to least critical. Indicate the order for completing the tasks and who will be completing each task. Tally the amounts of time allotted for each kind of task and establish dates and times for completing them.

When done, put it all together in a memo. Put it all together in your Project Binder in reverse form starting with work plan and ending with the analysis and research.

DUE: Wednesday, January 23

ITERATIVE STUDIES

site model

This site model is to be used for placement of future Schematic Design models. Using the site plan as a base document, construction a model with appropriate context. Buildings modelled should be abstracted slightly, but should, at a minimum, suggest the massing of adjacent structures. Existing organizing lines (i.e. predominant floor levels, elevational zones, etc.) should be suggested.

Model should be constructed at 1/16th scale. Although models will be used during presentations, the models are "study" models and will be modified as the process proceeds. In other words, please invest the appropriate amount of time necessary- don't waste you time on creating a flawless site model.

concept models

During this pre-design phase, document your firm's thoughts continuously through sketching and modeling. The Pre-Design phase is meant to "uncover" and "collect" as much relevant information about the internal (program, adjacency, code, etc) and external (site, regulatory concerns, demographics) influences as possible. The Schematic Design phase responds to this information through the iterative presentation of models and drawings (plans, sections, etc.).

Construct ten (10) scaled conceptual / schematic models which respond formally to the information gathered during your analysis. The process should be directed by a strong concept which emerges from the analysis of all relevant pre-design information.

DUE: Monday, January 28

