

Ball State University
College of Architecture and Planning
Department of Architecture
Fall 2009

ARCH 201 Architectural Design
Professor: Joshua Vermillion

COURSE SYLLABUS

*“We shall not cease from exploration, and the end of all our exploring
will be to arrive where we started and know the place for the first time.”*
T. S. Eliot

CATALOGUE DESCRIPTION: ARCH 201

Introduction through projects to architectural design with emphasis on the methods associated with the creation of architectural space and with place-making; to spatial programming, precedent studies, the design implications of site analysis, and the use of precedent studies; to relations between design and technical infrastructure and material selection.

COURSE OVERVIEW

In Second Year, the principles of basic design (form, space, order) and the fundamental elements of architecture (space, time, place and event) are reinforced and an understanding of the integration of all facets of design including research, analysis, programming, technology, systems integration and design communication is developed. Critical thinking skills in the theory and practice of architecture will mature as you form an understanding of architectural design as a reiterative, disciplined process. This knowledge base becomes the foundation for more involved work with increased intellectual rigor in the spring semester. A concrete understanding of context, site, structure, user function, and social and behavioral issues as components of a comprehensive architectural concept must drive the work. You must demonstrate your ability to constitute clear concepts, which inform and guide design inquiry and establish a way of thinking about a given issue throughout the design studio sequence.

The semester is divided into three sections, therefore three projects, and a one weeklong field study investigation in Canada. Each of the three projects has differing integrative phases allocated to each, although the work is best reviewed as a comprehensive act. Project One therefore explores Space and Time, Project Two reinforces the exploration of Space and Place and Project Three concludes by investigating Place and Event. The final project will be sited in East Central Indiana and will come into being through the interaction and tension between concrete objectives involving site, client and program, and your own subjective, value-rich visions. How do your individual experiences transpose into an ethos or tactic for design and building? This question requires a patient, passionate, and productive search for each and every one of us! The overall objective of this studio is to provide the creative environment where we can do our best work!

COURSE OBJECTIVES

Develop clear concepts that guide the design process; develop critical thinking and self-criticism grounded in an understanding of the environmental, cultural, social, and physical context of an architectural project; develop an awareness of construction materials and methods and technical infrastructure as integral components of the creation of space and place; reinforce the development of skills in model building, writing, speaking, drawing, and digital manipulations necessary for the successful communication of design ideas.

We will work towards achieving the following additional core objectives for Architecture Design 201:

- *Fundamental Design Skills: Ability to apply basic organizational, spatial, structural, and constructional principles to the conception and development of interior and exterior spaces, building elements, and components.*
- *Formal Ordering Systems: Understanding of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design.*
- *Critical Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards.*
- *Use of Precedents: Ability to provide a coherent rationale for the programmatic and formal precedents employed in the conceptualization and development of architecture and urban design projects.*
- *Site Conditions: Ability to respond to natural and built site characteristics in the development of program and design of a project.*
- *Graphic Skills: Ability to employ appropriate representational media, including computer technology, to convey essential formal elements at each stage of the programming*
- *Verbal and Writing Skills: Ability to speak and write effectively on subject matter contained in professional curriculum.*
- *Collaborative Skills: Ability to identify and assume divergent roles that maximize individual talents, and to cooperate with other students when working as members of a design team and in other settings.*

COURSE REQUIREMENTS

Understanding cultural and contextual variables, and introductory understanding of technical infrastructure and materials and methods of construction through two- and three-dimensional drawings, including site plan and site section; building plan, section, and elevation; and verbal and written presentations for the types of projects indicated in the catalogue description and the course objectives above.

Students will be required to work collaboratively in teams as well as independently. An analysis of a common case study/precedent will be used throughout the second year architecture courses with emphasis on the use of design precedent as a fundamental component of design research.

SYSTEM OF EVALUATION

Final Grades: Everything that we require you to do will be graded and each submittal will be weighted. Late submittals will receive 10% off per calendar day – no exceptions. A total number of points will be possible for a semester. Each student will be expected to contribute to class discussion and special group activities and participation will be 10% of your final studio grade. Interpretation and scale of final grades will be as follows:

- **A: Excellence**
A = 92.50%+, A- = 90.00% to 92.49%
- **B: Good work:** satisfaction of requirements and demonstration of a depth of understanding.
B+ = 87.50% to 89.99%, B = 82.50% to 87.49%, B- = 80.00% to 82.49%
- **C: Average work:** satisfying all of the requirements.
C+ = 77.50% to 79.99%, C = 72.50% to 77.49%, C- = 70.00% to 72.49%
- **D: Needs improvement**
D+ = 67.50% to 69.99%, D = 62.50% to 67.49%, D- = 60.00% to 62.49%
- **F: Fail**

Studio Projects: You are expected to complete each assignment and demonstrate a depth of understanding of the design issues raised in each studio project. Your discipline and maturity are necessary for the thorough development of your design ideas. The criteria listed below can serve as a *framework* for grading of studio projects:

- **Comprehension** (knowledge of and skill in visual acuity and observation, written verbal and graphic descriptions and comprehensive analysis and evaluation)
- **Conceptualization** (knowledge of and skill in design inquiry, critical thinking, disciplined and reflective design processes and multiple and iterative explorations)
- **Order and Integration** (knowledge of and skill in examining architectural issues systematically, applying basic organizational, spatial, and architectonic principles to the development of space and form)
- **Development and Resolution** (knowledge of and skill in relating clear conceptual thinking to the detailed development and final articulation of design project)
- **Communication** (knowledge of and skill in study modeling, generative drawing, synthesis of hand and digital media, analytical and experiential representation, media and technique appropriateness and clarity and composition)
- **Professionalism** (overall quality of presentation including continuity, consistency, clarity and completeness)

Note on studio work: We respect each of your ideas and your diversity of opinions. The process required to test your own ideas requires a diligent and patient investigation. The work you put into the development of your ideas in studio will be reflected in the progress of your projects.

“Creation is a patient search.” - Le Corbusier.

Process: 1) A system of operations in the production of something, 2) A series of actions, changes, or functions that bring about an end result, 3) Course or passage of time, 4) Ongoing movement; progression

Note on Process: The process of architectural design development is an extremely complicated undertaking and at times may be frustrating. It is imperative that you are able to push beyond levels of frustration in the development of a project. These frustration points are critical and sometimes require that you approach the problem from a brand new perspective in order to gain new ground towards a solution to the problem. Only then, will your design reach a level of depth that is truly rewarding. Our role as your professor is to encourage you to push through these moments of frustration and offer new ways of looking at the problem leading to the development of your projects.

Attendance: You are permitted 2 misses during the term, no matter what (funerals, weddings, health) and then penalize no matter what (exception, severe, and well documented health problem). Unexcused absences beyond the aforementioned permitted 2 will eventually lead to a lowering of the final grade.

STUDENT RESPONSIBILITIES

Read: As a student, it is important to take control of your own education. In studio, we will have various reading assignments, however, we encourage you to read journals and books above and beyond the assignments. It is essential that you use the library extensively to search for architectural precedent for each exercise and embark on a deeper strategy for research, beyond just collecting information. The library can help you locate these extracurricular readings. If you find something in your extracurricular reading that you feel is applicable to the studio, give it to your professor to make photocopies for the class.

Explore: Your willingness to explore different ideas and throw away initial design solutions for further explorations can only make your projects better. Class grades depend on your willingness to explore and search for multiple answers, your ability to compare and weigh different options, and your capacity to identify, communicate, and critically evaluate your design intentions. You are your own best critic. The design projects will be graded by how successful you are in satisfactorily exploring the intentions, goals, and design objectives that you have set up for yourself. You will be constantly asked to formulate, define, and communicate your iterative design intentions as the primary method of evaluation.

Communicate: An effective architect is able to visually and verbally communicate his or her ideas very well to the client. We expect the same from you as a student. You must be able to visually show your ideas using image, modeling, and drawing techniques. Verbal communication will serve to supplement/reinforce your work. We will present/discuss ideas publicly often.

Management: File management is imperative in order to become efficient with the computer. Each student should have the appropriate storage medium to save his or her work. Back-up often!!! The computer, the computer lab, printers, zip disk crashes, failure to save, and other tech related problems are not acceptable excuses for late work. Plan ahead for problems. Develop a plan B. It is imperative that you budget your time in anticipation of problems with crashes, printing, lines, etc. Time management skills are essential in our design profession.

If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My email address is jdvermillion@bsu.edu.

Recommended texts:

- Abercrombie, Stanley. *Architecture as Art. An Esthetic Analysis*. New York: Van Nostrand Reinhold, 1984.
- Moore, Charles and Allen, Gerald. *Dimensions: Space, Shape & Scale in Architecture*. New York: Architectural Record Books, 1976.
- Rasmussen, Steen E. *Experiencing Architecture*. Cambridge: MIT Press, 1962.
- Norberg-Schultz, Christian. *Intentions in Architecture*. London: Allen and Unwin, 1963
- Hall, Edward T. *The Hidden Dimension*. Garden City: Doubleday, 1966
- Lynch, Kevin. *Image of the City*. Cambridge: MIT Press, 1960
- Bloomer, Kent and Moore, Charles. *Body, Memory, and Architecture*. New Haven: Yale University Press, 1977
- Rudolf Arnheim. *The Dynamics of Architectural Form*. University of California Press, Berkeley, CA., 1977.
- Norman Crowe. *Nature and the Idea of a Man-made World*. MIT Press, 1995
- Pye, David. *The Nature of Design*. New York: Reinhold Publishing, 1964
- Scott, Geoffrey. *Architecture of Humanism*. London: Constable and Co., 1924
- Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, 1977
- Kolarevic, Branko. *Architecture in the Digital Age: Design and Manufacturing*. New York: Spon Press, 2003.
- De Landa, Manuel. *A Thousand Years of Nonlinear History*. Cambridge, MA: MIT Press, 1997.
- Rapoport, Amos. *House Form and Culture*. Englewood Cliffs, NJ: Prentice Hall, 1969.
- Frampton, Kenneth. *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture*. Cambridge, MA: MIT Press, 1995.
- Davis, Howard. *The Culture of Building*. New York: Oxford University Press, 1999.
- Gropius, Walter. *Scope of Total Architecture*. New York: Harper Press, 1955.
- McCullough, Malcolm. *Abstracting Craft: The Practiced Digital Hand*. Cambridge, MA: MIT Press, 1996.

Magazines:

- AA Files (UK)
- A+U Architecture and Urbanism (Japan)
- Architectural Design* (UK)
- Architectural Review* (UK)
- Assemblage* (US)
- Domus* (Italy)
- Fine Homebuilding* (US)
- Global Architecture* (Japan)
- Lotus* (Italy)
- Places* (US)
- Space and Society* (Spazio and Societa) (Italy and US)
- Architecture* (US)
- Architectural Record* (US)
- Architecture d'Aujourd Hui (France)
- El Croquis (Spain)
- Techniques et Architecture (France)
- Praxis*

These are general references that will be useful for the entire architectural design sequence. More specific readings and reference packets will be required for each studio project and made available in PDF format.