

Pratt Institute School of Architecture
Undergraduate Architecture Program

	Arch 400-401/402/403	Advanced Design	
Fall 2004			
Class Credits:	5		
Type of Course:	Required Studio		
Class Meetings:	M/TH 9AM-1PM UG Architecture M/TH 9AM-1PM UG Interior Design		
Prerequisites:	Arch 301/ 302 or equivalent with at least a grade of "C"		
Enrollment Capacity:	15		
Instructor's Name:	Anthony Caradonna	Architecture	email = acaradon@pratt.edu
	Francine Monaco	Interior Design	email = monarch@daquinomonaco.com
Location:	Higgins Hall North	503	Studio
	ISC	101A	Site

Course Overview:

Upon completion of the six semester core curriculum of fundamental, intermediate and comprehensive design studios, students enroll in the 3 semester advanced design studio curriculum. Students develop a 2-3 semester curricular path in the Advanced Design studio sequence by selecting from the diverse set of studio options in Arch 401/ 402 /403 which investigate programs and sites in three major categories: **ALTERNATIVE SOCIAL STRUCTURE, INSTITUTIONS, AND URBAN FORM AND INFRASTRUCTURE**. Students select a sequence of studios in anticipation of a Degree Project Research topic for the final independent design studio option.

Learning Objectives:

Arch 400 Advanced Design Studio III completes the sequence of advanced option studios and presents the broad range of issues and concerns of architectural design in anticipation of the Degree Project year. Expanded development of individualized approaches to the design process refines the students' ability to work independently. Investigation into the architectural issues relative to site, program and technology prepares the student to define specific topics of investigation.

Course Requirements:

As per Institute rules, (3) three unexcused absences will result in an automatic failure of the course. Developmental drawings, models and supporting documentation are required for each class. Attendance and participation in midterm and final presentations are required. Successful completion of midterm and final project requirements and reviews is required and no make-up or postponed project submissions will be accepted except in the case of unforeseen circumstances and emergencies. Excused absences and project delays must be officially cleared, by professor, in advance, in order to be considered valid.

Students will be working on full scale-assemblies and constructions of project proposals. Semester projects will require students to develop a transportable kit of parts assembled on and off-site and develop supporting physical and digital drawings and models. Student projects will require students to work in studio, on-site and in the architectural model shop in order to develop and complete semester projects. All students must complete shop certification requirements and have a validated shop sticker in order to use the facilities. Shop certification schedules and shop hours will be available during the first week of class.

Students will be required to develop projects using Sketch-up provided free of charge by the instructors courtesy of the software provider. Students will also be required to draw and build in relationship to actual scale all semester long. Plans, sections and elevations drawn in autocadd or manually as well sketchup 3-d models are the minimum drawing requirement weekly and at presentations.

Students will work at quarter scale for the first 3 weeks of the semester in chipboard and basswood models. Then project scale will shift to half and full scale development. Students will build mock ups in masonite and plywood. Final furniture pieces from donated materials courtesy of Manufacturers: Kirei board (KireiUSA), Plastic Plywood (3-form). Lighting projects will begin in paper and proceed to plastics as projects develop.

Project Parameters:

Emphasis is on the research and design of an architectural proposal carried to the most advanced pre-professional level of conceptual, programmatic and technical inquiry and resolution at various scales of project development.

Project Description:

Architecture & Interior Design : Collaboration & Exchange

The Goal of this Interdisciplinary 4th Year Advanced Design Studio Option is to repeat the collaborative design laboratory that joined the Undergraduate Architecture and Interior Design department last fall which investigated the overarching issues that define and link the disciplines of Interior Design and Architecture.

The two 5 credit studios will consist of 20 students(maximum). Students will work in collaborative teams pairing ten architecture students with ten interior design students. Students will question and define the specific role of each team member/discipline and the working method for developing a conceptually driven, collaborative approach for researching, designing and constructing an environment for **Reading**.

Collaborative Teams and Individual Projects

Students will take advantage of this interdisciplinary design opportunity to work in teams on individual projects. Defining leadership and collaborative roles of team members, organizing schedules of project development and construction and offering/ inviting discussion, critique and interchange of ideas are requisites of the studio. Learning how to work in various modes with multiple collaborators is a reality of the paired disciplines. This semester will allow students to develop, incorporate and advance these skills in order to better prepare students for futures in the allied disciplines.

<u>Teams</u>	<u>Students</u>	<u>Students</u>	<u>Students</u>	<u>Students</u>	<u>Site</u>
1 Chair	Interior	Architecture	Interior	Architecture	N Wall/Clg/Flr
2 Table	Architecture	Interior	Architecture	Interior	Central Wall/Flr
3 Wall Shelf	Interior	Architecture	Interior	Architecture	S Wall/Clg/Flr
4 Lecturn	Architecture	Interior	Architecture	Interior	E Wall/Clg/Flr
5 Light	Interior	Architecture	Interior	Architecture	W Wall/Clg/Flr

Conceptual translations: Ideas into space and material

Historically, theory and practice have reciprocally informed designers and the built environment in various ways. The primary objective of the advanced design studio is to explore the procedural sequence of developing and translating abstract and interdisciplinary ideas into the physically palpable language of space and material intrinsic to architecture and interior design. Accepting the platonic credo that the unexamined life is not worth living, the studio challenges students to develop a personalized, reflective, self-guided, conceptually-driven, critical and rigorous design process that is informed and directed by ideas and strategies developed through research, experimentation, evaluation and transformation. This articulated process is intended to assist students in developing an autodidactic approach to life-long education and practice where research and inventive decision making form the basis for culturally responsive, responsible and innovative contributions to the existing, built and developing environment.

Limits: Creative Resistance

The applied arts are inherently challenged with a frequently irreconcilable dialectic between form and function, theory and practice, idea and material. Within this context, the conceptual and creative dialogue inherent in the design process requires designers to define, accept or reject specific conditions or positions in order to develop a working method. This context of limits provides fertile ground for inventive problem solving and creative thinking and making. In theory, the tabula rasa is an idealized context where anything is possible and the context is mute. In practice, the built environment is not a blank slate but a minefield of conditions, constraints and limits to be accepted, identified, embraced and evaluated. The context of interior space is ripe with limits which designers must confront and negotiate. This context of limits will be a source of creative resistance in which students will be challenged to work in a creative straight jacket (i.e., Houdini) in order to expand their abilities to resourcefully address and explore the latent opportunities for invention inherent in dead-end design scenarios. Necessity as the mother of invention, and the parable of the five loaves and two fishes that fed five thousand remind us that frugal strategies can yield unimaginable design dividends. The indigenous American plains peoples developed an extremely inventive, "no-waste", sustainable recycling process of the American bison as a kit of parts for every aspect of their physical environment. Students will work in this spirit within a limited interior site in order to exploit the unique design conditions at hand. Students will be required to use a specified limited amount of materials to develop a kit of parts to create an environment for **Reading**.

Inside/Outside- Room & Furniture

Since the Industrial Revolution, the building membrane has perhaps incorrectly served as the traditional boundary and point of departure between the disciplines of architecture and interior design. This studio attempts to explore this and other misconceptions and traditions in order to explore spatio-conceptual notions specific to both disciplines.

The shared field of inquiry between disciplines, the spatial dialectic of inside & outside, will be the starting point for students to engage questions and develop a discourse and design approach related to notions of **space, territory, structure, enclosure, material, construction, light, color and program**.

The terms **Room & Furniture** will serve as a point of departure and overlap for defining the conceptual, physical and spatial qualities boundaries & limits of an environment for **Reading**. The nature & relationship of **room & furniture** have occupied the imagination of architects and interior designers for centuries. The multivalent overlaps, interconnections and notions of **room & furniture** fuel the discussion and exploration of the full scale construction of intimate spaces for **Reading**.

Scale: at close quarters

The direct and immediate experience available through the intimate rapport with the interior landscape provides an opportunity for both disciplines to confront and explore the qualities of actual scale. Further, the design process shared by interior designers and architects assumes, anticipates and obviates the construction of proposals at full scale. In order to confront the issue of scale more directly the semester projects will explore the application of spatial ideas at full scale. Team project boundaries will be limited to the scale of the human body and its physical extremities in order to focus on the issues of haptic space, intimate scale and detailed material qualities. The project will proceed from the concepts and scale of **furniture** to the limits implied by the term **room**.

Detail & Joinery

The detailed development, planning and identification of physical elements and assembly strategies requires a scalar focus that links ideas at telescoping levels, from the parts to the whole. The conceptual, creative and experiential potential inherent in the realm of detail and joinery of physical elements provides fertile ground for examining the notion of intersection and assembly. Students will develop semester projects generating ideas from the intimate detail to the physical limits. **Furniture** is a poignant point of departure for generating and defining conceptual, spatial and physical relationships materialized and reiterated within the physical assembly of parts and between the armature of a coherent body of structural, enclosure and spanning elements.

Kit of Parts

Students will design and develop elements and assemblies that can be easily assembled, fitted, used, disassembled, packaged and transported between site, studios and personal addresses. Students will begin with and be limited to one sheet of 4' x 8' sheet or planar material to develop semester projects.

Students will incrementally design and test fit:

- 1 **Chair**
- 2 **Table**
- 3 **Shelving Partition**
- 4 **Lighting fixture**
- 5 **Lectern**

Students will explore the interactive relationships and discursive fit between these individual elements in order to create a variety of viable scenarios related to the rituals of reading. Generating a series of discreet and specific elements that perform specific functions - structure, enclosure, connection and spanning – from the singular sheet material to develop a typology of parts. Students will employ drawing, templating, folding and other reductive strategies to exploit every square inch of material as part of the final design proposal.

The spatial results of these elements and arrangements should take maximum advantage of potential of the materials behavioral and dimensional qualities as well as creating a spatial taxonomy within each piece and between individual furniture elements. The result ensemble of group projects will, in conclusion, provide fertile ground for exploring a variety of interactive arrangements, forms, fittings, and functions for making spaces to read in.

Materiality

The studio will investigate the ways in which the inherent qualities of specific materials inform design.

This semester planar or sheet materials will be investigated in order to capitalize on the specific dimensional and behavioral qualities that provide a range of possibilities and limits. Donations from Kirei USA and 3-form will allow students to research, prepare and experiment with actual materials in order to eventually build final furniture designs at full scale. Students will begin working at quarter scale in chipboard and basswood, then at half scale in masonite and plywood and finally building full scale pieces in Kirei board, a sorgum residual panel, and plastic plywood. Students and groups working on lighting designs will work with paper, styrene, polypropylene, polycarbonate and vinyl to explore the potentials of these flexible materials. The support course ARCH 413 Wood and Metal, will serve as the technical research laboratory for exploring and refining the parameters of material applications.

Site

The proposed project will be sited on the Pratt Institute Campus in the ???.

Students will spend the semester constructing chairs, tables, shelving partitions, lecterns and light fixtures for Reading environments in a room on the Pratt campus. The project will require students to work in response to the dimensional, spatial, material and lighting conditions of the room as well as to furniture proposals of fellow classmates.

Program: Reading

Students will develop specific programmatic approaches to the ritual of **"Reading"**. The intimate experiential space created in the act of reading a book/viewing a creative object or image and the associated issues related to the page, the word, silent or spoken, the closed or opened binder, the bookshelf are territories for programmatic exploration and development. The interrelated environmental aspects, of light, view, enclosure and repose are also subjects for programmatic development as well as equally potent legible conditions equated with reading. Students will be asked to chose a specific text and weave conceptual themes related to the act of reading and sequence of experience into the development of the **"Reading Spaces"**. Students will be required to develop spaces for reading, sitting, view, providing lighting and a sense of enclosure in the most practical and poetic terms.

The studio project will proceed from

- **overarching idea can determine design decisions**
- **1:1 scale constructions**
- **begin from the detail extending to the body and expanding to the scale of the room**
- **Furniture & Room as origin of the project from detail to its limits**
- **Limits as "creative resistance"**

Budget

Materials - plywoods, lamintes, masonite, veneers, plastics
material and dimensional limits

Program- Reading furniture
Anthropomorphics

Limits of space to be determined by

- **Qualities & constraints existing conditions**
- **Plywood, wood laminate or veneer material -strategically limited**
- **Programmatic and Anthropometric parameters:**
 - Reading/Viewing (book, shelf, lecturn)**
 - Sitting (chair)**
 - Standing (wall, partition, screen, window)**
 - Lighting (natural, electric, candle)**

- Materials:

Kit of Parts: Functional
Structure / Support & Supported
Enclosure
Aperture
Light
View
Joints and Connectors
Transparent / Transluscent / Opaque
Rigid / hard / Flexible / Soft

Requirements:

Bibliography:

Gaston Bachelard, "The Poetics of Space "
Italo Calvino, "Invisible Cities"