

**NJIT**

## **ARCHITECTURE + INTERIORS**

**SUMMER 2018 with Professor K Brandt Knapp**  
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STUDIO LOCATION - LAB 140 | 4th FL Deck

## **ARCHITECTURE + INTERIORS**

### **SYLLABUS**

#### **COURSE DESCRIPTION**

This pre-college course is designed to be an exploratory, week-long retreat into contemporary design ideas and modes of making relevant to potential architecture and interior design majors. Design fundamentals are taught through quick exercises, and the students gain technical means using current software, fabrication tools and analog processes. Creative work is produced and discussed in the computer lab, the open studio, the pin-up areas in the building as well as during the field trip to New York City.

#### **GOALS**

The goal of the “studio” is to introduce architecture and design education to the potential undergraduate student. By the end of the one-week intensive, students will have work to include in a portfolio and the unique experience of studio culture to help guide each student into his or her college life. An understanding of current,

accessible modes of making is sought to assist students to continue building a body of work.

## STUDIO ETIQUETTE

As in all studio environments, the student will learn more from his or her peers than from the instructors. It is a place for discovery, comradery and creative collaboration! The studio shall be a fostering, encouraging and challenging in the sense of broadening perspectives, safe place for all artists/designers to work his or her best. (Any issues such as music preference or supply sharing should be discussed in a positive manner \*respect is key)

## ASSIGNMENTS

*Exquisite ~ Corpse | Cut ~ Line | Scale ~ Dimension | Sight ~ Site | IN/OUT-STALL*

The initial three exercises establish creative, design thinking, drawing/modeling conventions and tool workflows, both analog and digital processes. The project IN/OUT-STALL will focus on the relationship between exterior form and interior experience. The initial exercises will act as building blocks for the design of an inhabitable stall. The field trip will reveal the city through an architectural lens (sight) - sketching, noting or photographing will document each student's experience. At the various sites, emphasis on "in" and "out" will be documented.

## DOCUMENTATION

It is paramount for artists/designers/architects to document well. All 2D work will be on 8" x 8" cardstock provided. Models will be photographed. Sketches will be scanned. A final PDF will be submitted. A physical "book" will be ready to bind all 2D work at the weekend.

# ARCHITECTURE + INTERIORS

## SCHEDULE

SUNDAY 3:30pm Move-in at Honors College / Campus Tours

5:00pm Welcome Dinner @ CoAD

MONDAY 9:00am Introductions | *Exquisite ~ Corpse* 3D Partner Game

11:00am Drawing Conventions & Scale + Q&A 11:30am Working Hour  
(orientation - elevations) - studio 12:30pm Lunch 1:30pm Rhino 2D lines & 3D  
*Exquisite Corpse* + Q&A 2:30pm Working Hour - computer work 3:30pm  
Demonstration *Cut ~ Line* (cricut machine) 5:00pm Dinner & Activities

TUESDAY 9:00am Interiority - Poché | Light and Experience

10:00am Working Hour (plans and sections - sketch poché) 11:00am  
Representation Talk in Lab 11:30am Working Hour (lab or studio for *Scale ~  
Dimension*) 12:30pm Lunch 1:30pm Group Pin-up Discussions (& Shake Shack  
Order) 2:30pm Activities & Dinner..

WEDNESDAY 9:00am Public Transit to NYC (Manhattan) | *Sight ~ Site*

10:30am Architecture Office Tour (Varies per Session) 12:00pm Lunch in a  
Park (Pick-up from Shake Shack) 1:15pm Exhibitions (Storefront & Arch  
League) 3:30pm High Line Walk 6:00pm Pizza in the city 7:00pm Public  
Transit back to NJIT

THURSDAY \*9:30am Collective Site Discussion

11:30am Section Crits 12:30pm Lunch 1:30pm Desk Crit Sign Up / Working Hour  
3:00pm Demonstration - Photographing Models 3:30pm Final Desk Crits or  
Demonstrations (laser cutter..) 5:00pm Dinner 6:30pm Working Hour w/ TAs &  
Activities

FRIDAY 9:00am Computer Lab File Exchange

10:00am Pin-up in The Gallery 10:30am Guests Arrive 11:00am  
Presentation w/ Family & Friends

\*Extra Curricular Activities may - GameRoom, Manhunt, Pool Time, Movie Night... \*This is a working syllabus &  
schedule - subject to change

## IN/OUT-STALL

**IN**terior **EX**terior / **OUT**side **IN**teractions

In architecture there is a fundamental relationship between the exterior form and the interior experience of the building. Is the concept of the architecture a dichotomy between the two? Is the exterior the result of the interior? What is “inside” and what is “outside”? What about composition – symmetries, proportions, hierarchies? Does the space have a perceptual “affect” from the way light comes into the building or the materials used? In any case, the stuff that makes architecture (drawings or actual building materials) deals with exactly these questions.

Working through a geometric game using the square, the quarter circle and the triangle, each student will develop a massing based on a 10' three-dimensional grid with maximum extents being 30' x 30' x 20' at scale. This massing will be the instigator for questions like the ones above. It is through model making and drawing, that each student will transform this massing into an architecture – with an **IN**terior and an exterior.

**STALL** /stôl/

noun

1 a stand, booth, or compartment for the sale of goods in a market or large covered area. 2 an individual compartment for an animal in a stable or barn, enclosed on three sides. verb

1 (of a motor vehicle or its engine) stop running, typically because of an overload on the engine. 2 stop or cause to stop making progress.

As a framework both for the building organization and for the programmatic component, each student will interpret **STALL** as it relates to the habitation of the project. Thinking of the word in both its noun form and its verb / act form is useful to propose the organization / layout of various elements as well as define a narrative or story from an inhabitant's perspective – why someone might “stall” / slow-down in speed to experience the architecture. The curation of light, view and body positioning will occur through the design of architectural elements – specifically the wall, the floor and the roof.

**COLLECTIVE SITE**

The collective site is a clearing in a wooded area of rural New Jersey. The clearing itself easily accommodates a 25 Square (5 x 5) grid each @ 30'-0" and one enters via a hiking path. Main Street is a 10 minute walk on the path from the clearing. The hiking trail continues and is a loop that takes approximately 2 hours to complete. The **IN/OUT-STALL** location is a negotiation with your neighbors. North should be taken into consideration and the program path or sequence should be the instigator for the negotiations.

**PROGRAM**

The program for the project is defined by the narrative(s) / story of happenings each student develops of light, view and body positioning. A wall can be developed to incorporate a framed view, a roof can allow a slot of light to wash a wall, a floor can morph to create stadium seating. The program should help to define what the relationship is between inside and outside. Drawings and models allow for the communication of these architectural ideas.

# EXERCISES / DELIVERABLES

## Exquisite ~ Corpse

The result of the game will provide each student with a three dimensional volume that can be used to generate elevations from and be the basis for creating a model in the computer.

SKETCH MODEL 1/4" = 1'-0" DRAFTED ELEVATIONS 1/4"  
= 1'-0" 3D PRINT 1/8" = 1'-0"

## Cut ~ Line

Through "the cut" we will understand how to best describe / communicate the architecture. This exercise will also focus on fabrication principles - making use of the cricut machines, students will work simultaneously by hand and in a digital environment.

ELEVATION SILHOUETTES 1/8" = 1'-0" SECTION  
COLLAGE - POCHE 1/4" = 1'-0" EXPERIMENTAL  
DRAWING Any Scale

## Scale ~ Dimension

Body measurements and the relationship between built form and the human body will drive the discussions as they relate to the larger context and drawing techniques.

SECTION MODEL 1/2" = 1'-0" DRAFTED PLAN(S) 1/8" = 1'-  
0" SITE PLAN W/ CONTEXT 1/16" = 1'-0"

## Sight ~ Site

On our field trip, each student will be asked to find a particular relationship between an architectural element and an impactful experience. These happenings should be documented as to inform the INSTALL project and narrative.

PHOTOGRAPHS - FIELD TRIP not to scale WRITTEN  
NARRATIVE not to scale PERSPECTIVE VIGNETTES not to  
scale

# EXQUISITE CORPSE GAME

## 1 CREATE A GROUND

Using the 8" x 8" cardstock provided, center a 10'-0" grid @ scale - 1/4" = 1'-0" using light construction lines.

## 2 CREATE THE CANVAS

With a sheet of 8 1/2" x 11" cardstock, make a grid using construction lines that consists of 4 columns and 2 rows - again at 10'-0" with scale 1/4" = 1'-0" and cut it out.

### **3 PLAY THE GAME WITH YOUR PARTNER**

Fold the canvas in half so that a four square grid (2 columns and 2 rows) is visible. On one of the four square grids, add one shape given (full triangle across the diagonal, 1/4 circle) in column 1 and one in column 2. Indicate cut by hatching the shape or the negative space of the shape in relation to the grid. Turn the canvas over and hand it to your partner. Partner to repeat.

### **4 CUT THE HATCH**

Cut the hatched shapes out of the canvas, being mindful of thin connection points.

### **5 ORIENT THE CANVAS ON THE GROUND**

Using the grid on the ground (Z) that was created, orient the folded canvas with cut out shapes to establish a front (X) side and a right (Y) side - defining the 3-Dimensional 10'-0" grid (X, Y, Z) or lattice to work in.

### **6 INSPECT / IMAGINE, SLICE & FOLD**

Within the 3 Dimensional 10'-0" grid established by the folded canvas, imagine each cubic volume attached to the canvas to be filled with extrusions from the shapes given. Slice and fold the canvas, with the imagined volumetric massing in mind.

RULES: - one shape per cubic volume - slicing is only permissible at the grid lines - the result should be one massing (ie be careful of corners) - extrusions are limited to 10'-0" - the 9 square 10'-0" grid established as the "ground" is a boundary

### **6 CREATE A "WATERTIGHT" VOLUME (MASSING)**

Using a different color paper, make a sketch model (using tape) by filling in the imagined extrusions - creating one volume.

# SIGHT ~ SITE

## Session 1 \_ Wednesday, 11 June

As we experience the city, close observation with creative documentation through sketching and photographing, shall foster a better understanding of the built environment. Students are encouraged to use their visual *sight* to analyze and document various *sites* (building and social) for design strategies.

### SCHEDULE 9:15am Public Transit to NYC

(Light Rail or Bus - WTC **PATH** - **WTC** walk) 10:30am SOM (Skidmore, Owings & Merrill LLP) - Office Tour

(short walk) 12:00pm Lunch in City Hall Park (Shake Shack pick up)

(Brooklyn Bridge City Hall **6** to Spring St.) 1:15pm *Architecture Books* Storefront for Art & Architecture

(Spring St. **6** to Union Square - short walk) 2:30pm *OBJECTIVE* Arch League Exhibition @ Parsons

(long walk) 3:45pm High Line Walk (enter at 14th Street)

(34 ST - Hudson **7** - Times Square **2/3** - Park Place) 6:00pm Little Italy Pizza (11 Park Pl) (short walk)

7:00pm Public Transit back to NJIT

(WTC **PATH** - Newark Penn - **light rail**)

\*This is a working schedule - subject to change