Architectural Representation: Perception “See Yourself Sensing”

perceive, v. (*from the OED*)

I. To take in or apprehend with the mind or senses.
   1. trans.
      a. To apprehend with the mind; to become aware or conscious of; to realize; to discern, observe.
   2. trans.
      a. To apprehend through one of the senses, esp. sight; to become aware of by seeing, hearing, etc.; to see; to detect.

Course Description:
Design requires a point-of-view—a filter, lens or framework for conceptualizing, analyzing, inventing and representing architectural space. In this course, perception—a more conscious and analytical approach to perceiving—will launch our inquiry. The direct experience between the viewer (subject/inhabiter/user/mobile body) and the site (context/space/landscape/field) that defines the physical realm will be translated into drawings and models, from analytical notation and mapping, to
multiple drawings, collages and scalar models. We will investigate how different media and tools function in the design process, and how space is constructed, controlled and revealed in both reality and in re-presentations. Analysis will be threaded throughout the semester and will form a basis for critiquing existing space and media, and for generating new spaces and drawings. Photographs, texts, drawings, films, videos and models, both real and virtual, will serve as sources for transformation.

Gordon Matta Clark

Learning Objectives:
Students in Abstractions and Perceptions, at an introductory level, should be able to:
1. Visually communicate architectural concepts and design intent using discipline-specific techniques including:
   - orthographic projections (plans, elevations, sections),
   - paraline projections (axonometrics, isometrics),
   - physical models using various techniques and materials,
   - multiple media and/or combined representational strategies
2. Verbally communicate architectural research methods and spatial concepts
3. Demonstrate an understanding of precedent and site analysis
4. Demonstrate an understanding of design method as a step-by-step, iterative and incremental process of research, synthesis and feedback
5. Demonstrate an understanding of design thinking as responsive to and shaper of social and cultural context
6. Demonstrate the ability to work independently and collaboratively
7. Demonstrate an understanding of the historical and theoretical contexts for architectural representational conventions
8. Utilize a range of analog and digital techniques in the design process

Methodology:
The semester will be divided into four problems that unfold in the following sequence: a space, object or installation represented in a particular media or full scale, will be given as the subject for analysis, (research, critique, concept, stance). The analysis will then be the source for a re-presentation of the space, in a specific medium. Fine craft and the relationship between craft and concept will be emphasized, as will each student’s ability to formulate a concept, and manifest if in varying media. We will begin the semester with the scale of the body and an exploration of perception itself via our senses, then move on to the scale of a room, a sequence of spaces, and the city.
**Format:**
This course is based on the studio method. Students are expected to work independently to develop thinking/making skills, under specific parameters, and with regular critiques from a faculty member and teaching assistant. Class time will be divided into individual dialogues or critiques (desk crits), open discussions, student presentations, lectures and critiques with guests. Presentation of work will be public—either informal (pin-up) or formal (review). In both cases, students are required to present the work visually and verbally in order to instigate a discussion/critique about ideas in their work. Students have use of the computer lab in the Diana Center – 4th floor. The course will introduce various technologies, including Photoshop, and use of the Laser Cutter and require research and representation on the computer.

Dr. Ayer's Machine Volante

Athanasius Kircher: early hearing device

**Prerequisites:**
This is an introductory course for students interested in thinking about space and architecture, and is required for students majoring in Architecture. It is generally recommended for the sophomore year, and can be taken before or after Architectural Representation: Abstraction. Abstraction and Perception complement each other, with the former concentrating on conventions of architectural representation (orthographics, other possible projections) and the latter on other methods and techniques of spatial representation.

**Requirements:**
Attendance is mandatory at all scheduled classes. As per department policy, three consecutive absences or four non-consecutive absences will mean that you have dropped the course, or failed. The only excused absences are those for reasons of extreme health problems or crisis (you must receive written documentation (note from physician or dean). Unexcused absences (two) will reduce your course grade, as will late arrivals or early departures from class. Late arrivals to class (after five minutes) or missing a group review (not even an option) will lower your grade as well. Plan to spend your class time productively and have all previous work available.

In addition to in class work, the TA will hold workshops during evening or weekend hours, to assist with technical and conceptual issues. Your attendance is mandatory for these sessions, though there is some flexibility (for important weekends away).

**Sketchbook/journal/notebook:**
Students are required to maintain a sketchbook that will contain all drawings, sketches, notes etc. This is an important supplement to the studio, and a place to begin to develop a consistent process. Bring your sketchbook and a dark pencil to all classes, meetings and pin-ups. Use the sketchbook to brainstorm, to make lists of concepts, to formulate conceptual diagrams, and to initiate a creative diary.
Grading:
Projects are evaluated according to the student’s success in fulfilling the objectives of the project with emphasis on creative problem solving, process, development, imagination and the rigor of individual interest and output. Assignments and verbal brainstorming will identify the key concepts and criteria for projects. Students should target these key issues when producing work. Progress in craft, creative exploration and personal growth should be visible through the duration of the exercise. Process work will serve an important role in the development of a successful concept and the final manifestation of an idea. As such, evidence of the development of a work will play a significant role in determining student’s overall grade at mid-semester and at the end of the term.

Student’s analytical and critical abilities will be developed through critiques and written assignments in response to reading material or problems given in class. Development in these areas will also be factored into each student’s evaluation and grade at the end of the semester. Attendance, group discussions and improvement throughout the semester are important factors as well. You will be given a midterm review of your work and a final grade. Individual reviews with your critic, written and in person, and both daily and at the midterm and final, will help you to guide your work and evaluate your strengths and weaknesses. There are no incompletes. Work for each problem must be completed within the specified time frame allotted. Some work will be held for the end of the year exhibition.

Supplies:
Each student will have a desk in the 4th floor studio, the Diana Center, and 24 hr. swipe access (you may need to contact security to let you in until your ID is registered). While the list below may seem long, you will find that some tools can be shared, and that everything can be resold if necessary. Equip your desk with the following tools by next Wednesday (some tools will be required at a later date):

Basic: (wait on materials that are in Bold)
-parallel rule (36” or 42” - armor edge is recommended)
  many students buy the boards with ready-mounted rule. I find these clumsy and inaccurate. Consider buying the parallel rule alone, and simply attaching it to the desk.
-8” or 10” adjustable triangle, if possible, an additional larger 30/60 triangle for longer lines
-X-acto blades and holder (#11 blades) or Olfa knife
-architect’s scale (plastic, don’t mistake for metric engineer scale)
-24” metal ruler (also a small metal edge - 6” - would be handy for modeling)
-scissors (eg. Fiskars with orange handles)
-compass (set) (hopefully one or two will have this and not all will need to buy)
-french curves (come in set – good to have)
-swing arm light with base capable of being screwed to desk

Materials:
Modeling tools:
-1/16” chipboard – one ply, not thinner (30x40) for study models
-board cover for parallel rule (bigger than rule) or 1/16” white board (30x40)
  for drawing surface
-Elmer’s glue
-regular masking tape, black masking tape and draft dots

Drawing media
-scotch tape
-lead holder (receives leads)
- lead pointer (sharpens leads)
- leads (h, 2h, b)
- artist’s pencils (at least one b, 3b, 6b)
- technical pens (a set with thin point of 0000 or equivalent metric point (Rotring/Koh-i-nor)
- rapid-ink (for tech. pens (some require cartridges, others bottle)
- white pencil eraser, Staedtler Mars brand (do not use yellow ink eraser)
- erasing shield
- 18" role white trace
- sketchbook (9x12, preferably spiral bound) and spiral notebook for assignments, handouts
- desk brush
- desk cleaner
- pad of 18 x 24 bristol, kid finish, or in sheets as preferred
- 8½ x 11 printable pad of acetate (transparent, clear plastic paper) (later in semester)
- other papers as needed, including large double-sided mylar, pantone, and various modeling materials
** digital camera – best if you have access to a SLR

additional: basswood cutter will be very handy (hand tool with adjustable angle for snapping basswood available at Janoff’s)
various glues for model making

Supply stores: (always show your student ID)
Janoff’s Typewriter (2870 Broadway) - local, sometimes overpriced
Pearl Paint (on 23rd Street near Third Ave. check if still in business)
Utrecht (13th Street between Fifth and University
New York Central (11th and 3rd) good paper, expensive

For next class you will need the following materials, in order to work on the current project:

• pencils
• pens
• eraser
• sketch paper, sketchbook
• trace paper
• scissor
• tape
• straight edge
# Course Schedule for Spring Semester

***(subject to change - see assignments for final dates)***

<table>
<thead>
<tr>
<th>week</th>
<th>date</th>
<th>class</th>
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<tbody>
<tr>
<td>1</td>
<td>Wed 21 Jan.</td>
<td>orientation - <strong>project 1.1</strong> (body analysis) performance <strong>part 1.2</strong> assigned (analysis); equipment set-up; analysis note: all equipment on desks by next Wednesday</td>
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<td>2</td>
<td>Mon. 26 Jan.</td>
<td>in class work</td>
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<td>workshop: drawing techniques / modeling techniques</td>
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<td>Wed. 28 Jan.</td>
<td><strong>1.2</strong> (analysis) due <strong>1.3 mobile / immobile</strong> (model construction) assigned workshop: modeling techniques</td>
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<td>3</td>
<td>Mon. 02 Feb</td>
<td>study models due, begin final model</td>
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<td>workshop: modeling techniques</td>
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<td>Wed. 04 Feb.</td>
<td><strong>1.3</strong> model due assign <strong>1.4: facilitate</strong></td>
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<td>workshop: beginning orthographics</td>
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<td>4</td>
<td>Mon. 09 Feb.</td>
<td>in class modeling (orthographics, Photoshop) assigned workshop: orthographics - plan section and elevation</td>
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<td>Wed. 11 Feb.</td>
<td>d.c.</td>
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<td>workshop: Photoshop techniques</td>
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<td>5</td>
<td>Mon. 16 Feb.</td>
<td><strong>1.4: facilitate</strong> due <strong>1.5 documentation</strong> assigned workshop: Photoshop techniques</td>
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<td>Wed. 18 Feb.</td>
<td>drawing workshop</td>
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<td>6</td>
<td>Mon. 23 Feb.</td>
<td>continued drawing</td>
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<td></td>
<td>Wed. 25 Feb.</td>
<td>coordinating orthographics and Photoshop work</td>
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| Mon.    | 02 March | 1.5 documentation due  
project 2.1: Space, Passage, Analysis assigned |
|---------|----------|------------------------------------------------------------------------|
| Wed.    | 04 March | 2.1 research due  
2.2 montage assigned |
| Mon.    | 09 March | midterm: desk critiques  
workshop: tba |
| Wed.    | 11 March | desk critiques |
| Mon.    | 16 March | March Break  *********************** |
| Wed.    | 18 March | March Break  *********************** |
| Mon.    | 23 March | analysis |
| Wed.    | 25 March | 2.2 montage due (March 26th last day to pass/fail)  
2.3 inhabitable wall space assigned |
| Mon.    | 30 March | desk crits |
| Wed.    | 01 April | study model due |
| Mon.    | 06 April | desk crits |
| Wed.    | 08 April | workshop: inhabitable drawings |
| Mon.    | 13 April | in class drawing workshop |
| Wed.    | 15 April | model construction |
| Mon.    | 20 April | pin-up  
workshop: inhabitable drawings |
| Wed.    | 22 April | final model construction |
| Mon.    | 27 April | d.c.  
workshop: tba |
| Wed.    | 29 April | d.c. |
| Mon.    | 04 May | final critique  2.3 Inhabitable wall space |
| Tues.   | 05 May | final critique alternate  
reading day: alternate critique day |