B+C|A
Barnard and Columbia Colleges
Architecture Program

(left)bunpei yorifuji student work Virginia G. modeled by Kaeli Streeter

Architectural Representation: Perception ARCH UN3103.02

Spring 2018 Monday / Wednesday 10:00 to 12:50 pm
Instructor: Madeline Schwartzman Room: 404 fourth floor Diana Center
Email: mschwart@barnard.edu, note that I also use mks1@columbia.edu or maddyschwartzman@gmail.com
Office hours: by appointment (before 10am, after class)
Teaching Assistant: Min Chen mxc2101@columbia.edu
Email both Min and Madeline on urgent matters, attendance, lateness,
Architecture Office Location: 5th Floor Diana Center
Architecture Administrator: Rachel Garcia-Grossman 212 854-8430

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 present
analytical approach to perceiving—will launch our inquiry. The direct experience between the viewer
(subject/inhabitant/user/mobile body) and the site (context/space/landscape/field) that defines the
physical realm will be translated into drawings and models, from 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. Spatial 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.

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
9. Utilize three-dimensional digital modeling software 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 within 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 – room 401, 4th floor. The course will introduce various technologies, including Photoshop, and use of the Laser Cutter and require research and representation on the computer.

Prerequisites:
This is an introductory course for students interested in thinking about space and architecture, and is required for students majoring in Architecture. There are no prerequisites for this course. 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, field trips, and reviews. Studio is held Monday and Wednesday beginning promptly at 10:00 AM. Any student arriving after 10:20 AM will be considered late and anyone that arrives after 10:20 AM may be marked absent.

Absences due to acute illness, a personal crisis (e.g. a death in the family), religious observance, or for other reasons of comparable gravity may be excused. In all such cases, students must promptly email their instructor to communicate the reason for their absence and to arrange an opportunity to review any important information they may have missed.
Students who know they will miss a scheduled class due to religious holidays should email their instructor during the first week of classes with a list of dates for their anticipated absences.

Unexcused absences, late arrivals, or early departures from class will reduce your course grade. Three non-consecutive absences will result in a grade reduction by one-third (1/3) of one letter grade (e.g., A- to B+). Three consecutive absences or four non-consecutive absences will adversely affect your final grade.

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 a 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. 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.

**Grade Calculation:**
- Attendance, punctuality, preparation: 15%
- Participation: 10%
- In class work and brainstorm: 15%
- Projects: 60%
  - project 1: 15%
  - project 2: 25%
  - project 3: 20%

**Room Rules and Security**
After the first week of classes, students will be granted 24-hour access to the studio and DAL through their school ID. It is crucial that the doors to these spaces remain closed and locked at all times for your personal safety and your belongings’ security. Please do not prop open the door and do not leave any valuables unattended at your desk. The studio and the DAL are open to all students in approved courses; please respect other critics and students that are using the space. Barnard and Columbia
Security officers do periodically check the studio but security is a responsibility that we all share; please help us maintain a safe and productive environment.

If your personal belongings are stolen (or go missing) please notify your instructor and Barnard Public Safety (for room 404 Diana) or Columbia Public Safety (for 116 Lewisohn).

- You must provide your own lock for the locker.
- The studio must remain locked at all times.
- Use the spray hood in the model building room for spray paint or fixative.
- Use headphones for listening to music.
- You are responsible for keeping your desk and your storage area clean and organized. If you are using an empty desk adjacent to your assigned seat, it is also your responsibility to keep this area free of debris.
- 100% of the work surface of your desk space should be covered with 3-ply chipboard or vinyl board cover. Do not cut, carve, glue or otherwise destroy the plywood desktop.
- Please help us recycle and reuse extra materials by donating anything you don’t need to our recycling locations in the studios.

Supplies:
Each student will be assigned a desk in the 4th floor studio of the Diana Center, for the duration of the semester, and 24 hr. swipe access. Projects will require different equipment. More specific purchases should be made at that time. Consider this the equivalent of the book fees for the course. You can buy many of these supplies used, or new. I would hope that you would not spend more than $150 – 200 dollars, and possibly another $70 for paper, wood, plaster etc. I have used my supplies over and over for years. They continue to be useful for those of you who will continue with a life in design. Price shop and be clever. Equip your desk with the following tools by next Wednesday (some tools will be required at a later date):

- **Basic Tools:** (this is the basic list which should be purchased and ready by the second weekend of class, and on your desks. Your TA will be available to help over the weekend.

  - parallel rule (36" or 42" - armor metal edge (for cutting) is highly recommended). If you wish to purchase a desk that comes with a parallel rule, please look for a good one. Some of them simply do not work and cause a great deal of frustration. Many students buy the boards with ready-mounted rule. These can be clumsy and inaccurate. Consider buying the parallel rule alone, and simply attaching it to the desk, or buying an attached parallel rule that actually works.
  - 8" or 10" adjustable triangle and larger 30/60 (for long lines), plus miscellaneous other triangles may be helpful
  - X-acto with #11 blades and holder (suggest large pack or possibly share with another student), or Olfa knife with blades
  - architect’s scale (6 sided) plastic (NOT engineer’s scale, which in Metric and not inches)
  - scissors (eg. Fiskars with orange handles)
  - 24” metal ruler with cork backing or t-square cutting edge
  - swing arm light with clamp or screw on base highly recommended but not required ($10-15.)
  - scissors (Fiskars (orange handles) work well)
Basic Materials:
Modeling tools:
- plastic cutting board / matt (keeps blades from getting dull)
- 1/16" chip board 30"x 40" for model making
- vinyl board cover (must be larger than parallel rule) or 1/16" white board 30"x40" for drawing board surface (this will need cleaning from time to time)
- Elmer’s glue
- masking tape, Drafting Dots preferred
- Scotch tape / clear tape
- basswood cutter will be very handy (hand tool with adjustable angle for snapping basswood available at Janoff’s)

Drawing tools:
- lead pointer (special sharpener for leads)
- lead holder
- leads (H, 2H, B) – come in a box
- pencils (H - 6B) (at least one b, 3b, 6b)
- desk brush (natural hairs are better than plastic)
- white pencil eraser - Staedtler Mars
- erasing shield
-18" role white tracing paper, larger role may be required, one per assigned group
- sketchbook (should be at least 8x10 or larger, good paper)

Possible additional:
- various drawing pens
- compass (look for attachments - ink for example)
- French curves (come in a set)
- external hard drive
- printing good printer paper: studio printer may not be good enough quality
- at a later date, students will need to purchase Bristol Board, double sided Mylar and other papers and model making materials
- misc. modeling materials, including roll of plaster cast-forming material
- various glues for model making

Supply stores: (always show your student ID to receive a discount)

Janoff’s Office and Art Supplies
Located on Broadway between 111th and 112th Streets, Janoff’s is the closet art supply store to campus.

Blick Art Materials
Blick Art Materials has several locations in downtown Manhattan, offering a large choice of art supplies, tools, and materials.

Canal Plastics Center
Canal Plastics Center offers plastics and fabrication services and sells acrylics in hard to find colors and sizes. They also offer a student discount.
Artist & Craftsman Supply
Artist & Craftsman is located on 126th St and Adam Clayton Powell Blvd. They offer a student discount (with student ID).

Academic Accommodations Statement:
All architecture faculty should review the "important items to note" on the Barnard Disability Services website: [http://barnard.edu/disabilityservices/faculty-staff/faculty-info](http://barnard.edu/disabilityservices/faculty-staff/faculty-info). If you have specific questions about how to accommodate a student in the context of your course, please contact Barnard ODS staff, they will work with you to find the most appropriate accommodation.

If you are a student with a documented disability and require academic accommodations, you must visit the Office of Disability Services (ODS) for assistance. Students requesting eligible accommodations in their courses will need to first meet with an ODS staff member for an intake meeting. Once registered, students are required to visit ODS each semester to set up new accommodations and learn how to notify faculty. Accommodations are not retroactive, so it is best to register with ODS early each semester to access your accommodations. If you are registered with ODS, please see me to schedule a meeting outside of class in which you can bring me your faculty notification letter and we can discuss your accommodations for this course. Students are not eligible to use their accommodations in this course until they have met with me. Barnard ODS is located in Milbank Hall, Room 008. Columbia ODS is located in Wien Hall, Suite 108A.

Wellness Statement:
It is important for undergraduates to recognize and identify the different pressures, burdens, and stressors you may be facing, whether personal, emotional, physical, financial, mental, or academic. We as a community urge you to make yourself—your own health, sanity, and wellness—your priority throughout this term and your career here. Sleep, exercise, and eating well can all be a part of a healthy regimen to cope with stress. Resources exist to support you in several sectors of your life, and we encourage you to make use of them. For more information about available resources:

- Barnard Students: [http://barnard.edu/wellwoman](http://barnard.edu/wellwoman)
- Columbia Students: [http://www.college.columbia.edu/resources](http://www.college.columbia.edu/resources) Click on Health-Wellness
- Columbia GS Students: [https://gs.columbia.edu/health-and-wellness](https://gs.columbia.edu/health-and-wellness)
- Columbia SEAS Students: [http://gradengineering.columbia.edu/campus-resources](http://gradengineering.columbia.edu/campus-resources)

Honor Code:
The Barnard Honor Code applies to all students in this class regardless of academic affiliation. Approved by the student body in 1912 and updated in 2016, the Code states:

*We, the students of Barnard College, resolve to uphold the honor of the College by engaging with integrity in all of our academic pursuits. We affirm that academic integrity is the honorable creation and presentation of our own work. We acknowledge that it is our responsibility to seek clarification of proper forms of collaboration and use of academic resources in all assignments or exams. We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources. We will respect the rights of others to engage in pursuit of learning in order to uphold our commitment to honor. We pledge to do all that is in our power to create a spirit of honesty and honor for its own sake.*

The Columbia College Honor Code and the Columbia College Faculty Statement on Academic Integrity can be viewed here:

[https://www.college.columbia.edu/honorcode](https://www.college.columbia.edu/honorcode)
Please bring the following materials for Monday, along with the completed required Monday assignment, in order to progress on the current project:

- pencils
- black pens
- eraser
- sketch paper, sketchbook
- trace paper
- scissor
- tape
- straight edge

Rebecca Horn: *Finger Gloves, student work below, right, Kaeli Streeter*
# Course Schedule for Spring Semester

**ARCH UN3103.02**

**Architectural Representation: Perception**

**critic:** Madeline Schwartzman  
**assistant:** Min Chen  
**Spring 2018**

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### Week 1

- **Wednesday, 17 Jan.**
  - Orientation - **project 1.1** (body analysis) performance
  - **part 1.2** assigned (analysis); equipment set-up; analysis
  - Note: all equipment on desks by next Monday January 29

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### Week 2

- **Monday, 22 Jan.**
  - In class work
  - Workshop: drawing techniques / modeling techniques

- **Wednesday, 24 Jan.**
  - **1.2** (analysis) due
  - **1.3 mobile / immobile** (model construction) assigned

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### Week 3

- **Monday, 29 Jan.**
  - Study models due, begin final model
  - Workshop: modeling techniques

- **Wednesday, 31 Jan.**
  - Advanced models due

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### Week 4

- **Monday, 05 Feb.**
  - **1.3 immobilize** model due
  - Assign **2.1: facilitate** workshop

- **Wednesday, 07 Feb.**
  - First **facilitate** study model due

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### Week 5

- **Monday, 12 Feb.**
  - Enlarged **facilitate** model due

- **Wednesday, 14 Feb.**
  - **2.1: facilitate** progress model due begin documentation

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### Week 6

- **Monday, 19 Feb.**
  - **2.1: facilitate** progress model due begin **2.2: documentation**

- **Wednesday, 21 Feb.**
  - Documentation and Photoshop

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### Week 7

- **Monday, 26 Feb.**
  - Documentation and Photoshop

- **Wednesday, 28 Feb.**
  - Continued documentation
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<tr>
<th>Date</th>
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<th>Event</th>
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| 8 Mon. | 05 March | midterm: desk critiques  
reschedule to evening  
workshop: tba |
| Wed.   | 07 March | desk critiques |
| 9 Mon.  | 12 March | Spring recess  
workshop: tba |
| Wed.   | 14 March | Spring recess  
workshop: tba |
| 10 Mon. | 19 March | continued in class work finalizing project. Discuss project 2.1  
(March 22\textsuperscript{th} last day to pass/fail)  
project 2.2 due  
project 3.1: Space, Passage, Analysis assigned |
| Wed.   | 21 March |  
project 2.2 due  
project 3.1: Space, Passage, Analysis assigned |
| 11 Mon. | 26 March | 3.1 research due  
assign 2.2 A+B models  
study model due |
| Wed.   | 28 March | study model due |
| 12 Mon. | 02 April | desk crits  
study model due |
| Wed.   | 04 April | continued modeling |
| 13 Mon. | 09 April | 3.2 A+B due  
assign 3.3 Inhabitable Wall  
inhabitable wall brainstorm and modeling |
| Wed.   | 11 April | inhabitable wall brainstorm and modeling |
| 14 Mon. | 16 April | pin-up  
workshop: inhabitable drawings  
final model construction |
| Wed.   | 19 April | final model construction |
| 15 Mon. | 23 April | d.c.  
workshop: tba  
workshop: tba |
| Wed.   | 25 April | d.c.  
workshop: tba |
| 16 Mon. | 30 April | final critique 3.3 Inhabitable wall space  
final critique alternate (unusual circumstances)  
alternate critique day |
| Tues.  | 01 May | final critique alternate (unusual circumstances)  
alternate critique day |