Architectural Drawing and Rep. II

Spring 2015

CourseNo: ARCHA4024_001_2015_1
Meeting Time: T 10:00A-12:00P **Meeting Location:** AVERY HALL 113

Instructor Information:
Laura J Kurgan
Danil Nagy

Instructors:
Laura Kurgan, Leigha Dennis, Danil Nagy, Dan Taeyoung

*"If you want to understand what draws **things** together, then look at what **draws** things **together**." Bruno Latour.*

Architectural Design and Representation (AD+R) 1 and 2 are framed as an introduction for architecture students in how to think and design by way of drawing and modeling, not just with two- and three-dimensional architectural drawings (plan, section, elevation,) but also with representational practices that inform architecture (axonometrics, perspective, photography, film and video, collage, montage, image manipulation [photoshop and animation and 3-d printing], and finally, the formal systems that constitute architecture (point, line, plane, volume, surface, pattern, motion projection, descriptive geometry, diagrams, splines, meshes and networks).

In AD+R 2 we will begin with the premise, that nothing is simply visual, formal, technical or presentational as described above. Imaging systems inform the environments, or languages with, and within which architects design. Different tools make different kinds of images (from pencils to software, from perspective to virtual realities.) In this context, all images incorporate a technology of production, which actively operates upon what is being visualized -- no "drawing" environment is neutral. At the outset, therefore, the visual and the environment of the visual cannot and should not be distinguished from one another. Technologies of visualization will be considered in this course, as the context, which sets up not only a formal language of visuality, but an interrogation of their "symbolic forms".

In AD+R 1 your work focused on drawing and modeling in the context of a selected object, a building; your work was descriptive and prescriptive. In AD+R 2 we will focus tools for drawing and modeling, your work will be generative. You will start by making your own tools for drawing by actively and creatively engaging with the environments in which they are made. We will continue over the semester, to interrogate and our tools, so that these techniques

are neither working for us, automatically in place of thinking, or against us, as a way of limiting our working environment with visual imperatives.

To facilitate this focus, our work in AD+R 2 will be structured around the idea of The Drawing Machine.

The project will be divided into three phases:

1. The Drawing Machine.
2. The Digital Drawing Machine.
3. Sectioning Machines.

Course Format:

We are running the course as a Flipped Classroom, and students are expected to have completed the video tutorials in order to complete assignments. Instructors will therefore presume familiarity with the contents of the video tutorials during desk crits. The specific content of the tutorial assignments will only be covered during 'hands-on' sessions led by a video tutorial with one-on-one assistance by the course TA's and will be organized as necessary with your section TA starting the second week of classes. All Tutorials can be found at: http://skilltree.gsapp.org

Each complete assignment should be loaded onto the course Tumblr's at:

http://adr2-kurgan-sp15.tumblr.com/

http://adr2-nagy-sp15.tumblr.com/

http://adr2-dennis-sp15.tumblr.com/

http://adr2-taeyoung-sp15.tumblr.com/

As a companion to the course lectures on Tuesday Mornings, the class will have weekly Desk Crits/pinups/reviews and Tutorial Sessions. These will be run as weekly two hour sessions organized by your assigned course instructor. This time will be comprised of desk crits or pinups in response to the specific needs of the class as deemed by the individual instructors. 'Desk crits' will occur as follows for each instructor:

Kurgan – Room TBD
Nagy – Room TBD
Dennis – Room TBD
Taeyoung – Room TBD

Each of the assignments will be reviewed in either desk crits or pin ups. Your work is required to be posted on the class web page for grading, and sometimes for pin-ups.

Grades will be based on the following criteria:

30% Assignment A – Analogue Drawing Machine
30% Assignment B – Digital Drawing Machine
30% Assignment C – Sectioning Machine
10% Attendance and Participation

Requirements for the course:

-Attendance at the lectures, tutorials, reviews, pinups and desk crits
-Completion of the three assignments, includes the online posting and course pinups/review.

Recommended Reading:

There are no required textbooks for the course. There are recommended readings as a companion to the course lectures and discussion. The readings are excerpts from the books below. The recommended excerpt will be posted on the university's ***Courseworks*** site. We have also listed below a few books, which are recommended if you have not interacted with them in your education.

Mario Carpo, The Alphabet and the Algorithm

Charles and Ray Eames, Powers of Ten

Paul Klee, Pedagogical Sketchbook with introduction by Sibyl Moholy-Nagy

Bruno Latour, "Drawing Things Together"

Antoin Picone, Digital Culture in Architecture.

Wk	Date	Lectures – Tues. 10 m-12pm, Wood Auditorium	Tutorials	Group Pinup Tues. 12-2pm
1	**Jan 20**	**LECTURE: Introduction Assignment A : Drawing Machines**	**None**	**--**

2	**Jan 27**	**LECTURE: Point and Line to Plane: Laura Kurgan** **Tools and Representation: Dan Taeyoung** **Models and Constructs: Leigha Dennis** **Computer Aided Design : Danil Nagy**	**Machine Documentation**	**Group AB**
3	**Feb 3**	**No Lecture**	**Machine Documentation**	**Group AB**
4	**Feb 10**	**TA sessions**	**No Tutorial**	**Groups AB**
5	**Feb 17**	**REVIEW IN STUDIO 10-2pm**	**No Tutorial**	
6	**Feb 24**	**LECTURE: Intro to Assignment B: Digital Machine**	**Grasshopper 1**	**Groups AB**
7	**Mar 03**	**LECTURE: Software takes Command: Laura Kurgan** **TBD: Dan Taeyoung** **Defaults: Leigha Dennis** **Computational Thinking : Danil Nagy**	**Grasshopper 2**	**Group A**
8	**Mar 10**	**No Lecture**	**Grasshopper 3**	**Group B**
9	**Mar 17**	**SPRING BREAK**	**--**	
10	**Mar 24**	**TA sessions**	**No Tutorial**	**Groups AB**
11	**Mar 31**	**REVIEW IN STUDIO 10-2pm**	**No Tutorial**	
12	**Apr 07**	**LECTURE: Introduction Assignment 3: The Sectioning Machine**	**Workflows 1**	**Groups AB**
13	**Apr 14**	**LECTURE: Mulitple Dimensions: Laura Kurgan** **TBD: Dan Taeyoung** **Notation: Leigha Dennis** **Data Drawing : Danil Nagy**	**Workflows 2**	**Group A**

14	**Apr 21**	**LECTURE**	**Workflows 3**	**Group B**
15	**April 28**	**TA sessions**	**No Tutorial**	**Groups AB**
16	**May 06**	**FINAL REVIEW IN STUDIO 10-2pm**		