

Fundamentals of Urban Digital Design

Columbia University Fall 2018

Fridays 2pm-6pm

Fayerweather 201 and UP Computer Lab

Instructors: Jennifer Chang and Andy McGee

Description

This course provides conceptual and practical tools to enhance the visual literacy of urban planners, and teaches how to understand and communicate visual and spatial projects that range from the scale of the building to that of the city. The seminar begins on the premise that images are a form of language; thus during the semester, students will design and edit photos, series, maps, plans, sections, infographics, charts, renderings, and animations to develop a visual argument. Classes teach and detail the methods to realizing such work, and discuss conceptual techniques of effective visual communication. By the end of the course, students will know how to use the fundamental tools of Adobe InDesign, Illustrator, Photoshop and AfterEffects, Autocad and SketchUp, in ways that they can use in their course work, studio projects and professional development.

In operational terms, students will learn to:

- Create and edit maps and plans
- Edit digital photographs
- Create architectural massings and shadow studies
- Create renderings based on previous images, or on massing studies
- Create page layouts suitable for print and web presentations
- Create videos to communicate their project
- Gain a critical understanding of visual argumentation

In addition to class presentations and tutorials, each week, the instructor will upload references that speculate on the concepts and techniques discussed in class.

Course Project

Throughout the semester, students are asked to build, through visuals, a planning argument persuading an imaginary audience that either an iconic preserved public space has to be built up; or that an iconic preserved building has to be demolished. Examples of preserved public areas that can be proposed for building are a housing building at St. Patrick's cemetery in New York; a shopping mall in Central Park; or a Sports Center at Paris' Champs Elysees. Examples of buildings that can be turned into public open spaces are the Chrysler or Wall Street buildings in New York; or the Forbidden City in Beijing.

To this end, students will assume the agency and mimic the visual vocabulary of an urban planning related institution (suggestions below):

- 100 Resilient Cities www.100resilientcities.org
- ARUP www.arup.com

- Center for Urban Pedagogy www.welcometocup.org
- Design Trust for Public Space www.designtrust.org
- Ecosistema Urbano www.ecosistemaurbano.com
- Essex Crossing NYC www.essexcrossingnyc.com
- Gehl People www.gehlpeople.com
- Hester Street Collaborative www.hesterstreet.org
- Ihollaback www.ihollaback.org
- ITDP www.itdp.org
- New York City Parks www.nycgovparks.org
- New York City Community Garden Coalition www.nyccgc.org
- New York Restoration Project www.nyrp.org
- People Make Parks www.peoplemakeparks.org
- Project for Public Spaces www.pps.org
- Rebuild by Design www.rebuildbydesign.org
- Uprose www.uprose.org
- Urban Catalyst www.urbancatalyst-studio.de
- Urban-Think Tank www.u-tt.com
- Weact for Environmental Justice www.weact.org
- World Resources Institute www.wri.org
- Zones Urbaines Sensibles www.zus.cc

During the first half of the semester, students will work in groups of two to analyze the visual language used by their impersonated planning agency; and to elaborate a visual analysis of their urban case study that persuades, through photographs and plans, for either the preservation or the construction of their public space.

During the second half of the semester, students will individually develop a schematic urban proposal for their site through diagrams, renderings and sketches.

Deliverables

Weekly assignments lead to a final publication and video conveying your argument, which will be presented on December 14th.

Weekly Home Assignments

Typically a PDF document including:

- The assignment
- A title
- References used/copied/analyzed while doing your assignment

Students will upload their assignments to a shared GDrive folder before 12pm on Fridays.

You will name your files in the following way: wk x _ familyname

For example, Jenn would use: wk 1 _ chang

Editing Workshops

Twice during the semester, students will discuss and edit their work with peers in class. In these sessions, each student will print a mock-up of her/his work at 1:1 and take notes of edits to make.

Final Publication

This is the edited version of the student's visual project. It will take the form of a printed and bound publication; and as a youtube video.

Visual Precedent Analysis Presentation

Once during the semester students will make a short presentation (6 min) highlighting the relevance of renowned urban planning and design visual instances. It will describe the historical context, the purpose, and the technique used to craft the visual. To keep presentations to 6 min, students will upload a presentation PDF to the GDrive shared folder before class, and write a script of 600 words.

Class Structure

A typical class will follow the structure below:

2pm Instructor Presentation: Concepts & Precedents

We will introduce concepts and tools relevant to the topic of the class, putting special emphasis on examples and lessons from urban planning, urban design and architecture - however some concepts will necessarily relate to other disciplines.

2:20pm Student Presentation: Precedent Analysis

Each group will have 6 min to introduce some visual outcomes. What has been the use of the image and what would be the usefulness of this format? How might we learn from it? How have others learned from it?

2:45pm Break

3:00pm Group Review of Previous Home Assignment

We will review some examples of student work from our previous class, and discuss about ways to improve them. At this time students whose work is discussed are expected to take notes, and critically reflect on these comments for later edits of their work.

3:15pm Class Assignment

Instructor will execute an exercise with students with the aid of a tutorial format.

Calendar

			Software
W01	09/07	Evidence-Making and Visual Arguments	INDD

W02	09/14	Animated Instances (I) Book Format, Page Composition	INDD/AE
W03	09/21	Photos Documentary vs Candid Photography	PSD/INDD
W04	09/28	Maps Territorial Scale	CAD/AI
W05	10/05	Plans Neighborhood Scale	CAD/AI
W06	10/12	Animated Instances (II) Compositing maps into a format	INDD/AE
W07	10/19	Editing Workshop (I)	Print/Video
W08	10/26	3D Modeling Urban Representations	SKP/AI
W09	11/02	3D Post-Production Effects and Compositing	SKP/AI
W10	11/09	2D Fine Tuning Adding realism or narrative to your rendering	SKP/PSD
W11	11/16	2D Sketching Personalizing your Intervention	PSD/INDD
W12	11/23	Thanksgiving Break	
W13	11/ 30	Animated Instances (III)	INDD/AE

		Personalizing your Intervention	
W14	12/07	Editing Workshop (II)	
W15	12/14	Edited Final Publication Due	PDF/Web

- AI: Adobe Illustrator
- SKP: Google Sketchup
- AE: Adobe AfterEffects
- CAD: Autocad
- PSD: Adobe Photoshop
- PDF: Adobe Acrobat
- INDD: Adobe InDesign

Grading

10% Presentation of Precedent Analysis
 20% Weekly Home Assignments
 30% Editing Workshop I, and Midterm Publication
 40% Editing Workshop II, and Final Publication

Minimum Standards

Home assignments developed with a level of execution that is similar to the ones done in class will receive a Pass for this portion of the grade. Work that goes above this level – because of its complexity, consistency, or ingenuity – will be considered for High Pass, however only a small percentage of students will receive this grade. Students that do not submit home assignments, midterm and final projects, precedent analysis, or editing workshop drafts, will fail that grade portion.

Attendance

Punctuality is required to cover all instructional materials, and also it is a sign of courtesy to your instructors and peers. Students with more than two unexcused absences (arriving more than 15 min late or missing the class) will fail the course.

Assignments

This is not a Theory seminar. For this reason we will not evaluate your visual argument as if it is a research paper, but rather as a literary narrative made with visual means. We will look at how convincingly you tell a story through images. Research to find relevant data and images will count positively towards a High Pass grade, but not negatively towards a Low Pass grade.

References

Plagiarism is a serious offense against the value of intellectual honesty. In the context of this course, it is especially important that students clarify the distinction between their own elaborated images and borrowed references.

Printing Costs

Unfortunately, there is no budget for printing during the semester, and printing is mandatory for, at least, our three editing workshops, and for the final presentation.