



**MSAUD  
SUMMMER  
SEMESTER  
2019**

GSAPP - COLUMBIA UNIVERSITY

# FOREWORD

## Urban Design Program, GSAPP, Summer 2019: Integrated Curriculum

Welcome to your first semester of the Master of Science in Architecture and Urban Design program (MSAUD). Over the course of the summer you will be immersed in an intensive city-making laboratory – as well as a messy, iterative sandbox – where you will develop the tools for designing resilient, vibrant, and healthy urban environments within the New York City Metropolitan Area.

The UD Summer semester consists of four courses that operate intellectually and methodologically as an integrated curriculum. This approach is based on the sharing and coordinated learning of concepts, working methods, historical precedents, research protocols, and representational strategies. Faculty and associates will overlap, course times and subjects will mix, and design and research agendas will be tested in various settings. This integrated teaching model demonstrates how Urban Design might be less a unified science than a means to weave together varied tasks of storytelling, community engagement, filmmaking, digital visualization and representation, active mapping, and 3D modeling and parametric design, all of which will allow you to create urban knowledge and to iterate, represent and communicate design ideas.

The core of the 2019 UD integrated summer curriculum is the neighborhood. While the term is not without controversy, for cities like New York and its metropolitan region, the neighborhood as social and physical territory is central to popular, journalistic, professional, political and design discourses. It is also a place of experience and emotion. For the Summer curriculum, the neighborhood is both a laboratory for experiment as well as a site of learning and, in both cases, it is important to emphasize that we are participating in an ongoing process of change to which you are inventing new ways to rethink, reshape and regenerate an urbanism of the 21st century. In particular, working in post-industrial and climate-stressed conditions requires the critical interrogation and redefinition of many layers of existing and historic urban fabrics and infrastructures (in and beyond the neighborhood) in order to address the social life of current and future inhabitants.

Some questions you will be confronted with during the semester:

- How do we develop a productive way of working that incorporates the complex realities of multiple voices, scales, and fields of expertise?
- What is the agency of the urban designer?
- How do we design the process by which change happens together with its outcome?
- How do we provide visual evidence for our design decisions?
- Who are we designing for? Who is the “we?” Who are the actors in a given urban design project?
- How do we design urban spaces that respond to the limitations of dense and not so dense places?
- How do the interventions we propose today prepare all of us for the impact of climate change and increased pressure on existing urban patterns and densities?

# SUMMER SCHEDULE

		JUNE																																		
		06/03 FIRST DAY OF CLASS														07/04 HOLIDAY																				
		WEEK OF 06/03		WEEK OF 06/10		WEEK OF 06/17		WEEK OF 06/24		WEEK OF 06/24		WEEK OF 06/24		WEEK OF 07/01		WEEK OF 07/01																				
		WEEK 01		WEEK 02		WEEK 03		WEEK 04		WEEK 04		WEEK 04		WEEK 05		WEEK 05																				
		Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
WEEK THEME		ELEMENTS OF CITY FORM: CENTER, PERIPHERY, EDGE		HISTORICAL PRECEDENTS		POLICY, POLITICS, JUSTICE & EQUITY		TOP DOWN, BOTTOM UP, MIDDLE OUT, OUTSIDE IN		TOP DOWN, BOTTOM UP, MIDDLE OUT, OUTSIDE IN		TOP DOWN, BOTTOM UP, MIDDLE OUT, OUTSIDE IN		USER PARTICIPATION IN URBAN DESIGN SCALES OF GOVERNANCE		USER PARTICIPATION IN URBAN DESIGN SCALES OF GOVERNANCE																				
STUDIO		CONSTRUCTING SITE						CONSTRUCTING SITE REVIEW		URBAN SYSTEMS PRESENTATION		DESIGN EXPLO																								
DESIGN CHARRETTES		URBAN DERIVE				URBAN SYSTEMS								STUDIO MAKEUP SESSION 07/03 IN LIEU OF 07/04		MID-REVIEW 07/03																				
DTEQ SEQUENCE		<i>Agency of Mapping / Biases in Visual Representations</i>		<i>GIS Exploration / GIS-Illustrator Post-production Techniques</i>		<i>Data Collection at a Regional Scale 3D in ArcGIS</i>		<i>3D Modeling Video Editing and Motion Graphics</i>		<i>3D Modeling Video Editing and Motion Graphics</i>		<i>3D Modeling Video Editing and Motion Graphics</i>		<i>Layout / Video Editing &amp; Animation Workflow</i>		<i>Layout / Video Editing &amp; Animation Workflow</i>																				
	GIS RHINO GRASSHOPPER AFTEREFFECTS PREMIERE INDESIGN ILLUSTRATOR PHOTOSHOP																																			
RNYU		<i>Reading Urban Experience / Reading the Urban Environment</i>		<i>Urban Design in Film &amp; Video</i>		<i>Urban Design Politics I Pre-production: Constructing a Site</i>		<i>Screening Urban Modernism</i>		<i>Screening Urban Modernism</i>		<i>Screening Urban Modernism</i>		<i>Urban Design Politics II</i>		<i>Urban Design Politics II</i>																				
				DÉRIVE PHOTOS DUE		COGNITIVE MAP DUE		INTERVIEW DUE		INTERVIEW DUE		INTERVIEW DUE		SITE VISITS REQUIRED		SITE VISITS REQUIRED																				
								VIDEOGRAPHY WORKSHOP		VIDEOGRAPHY WORKSHOP		VIDEOGRAPHY WORKSHOP																								
URBAN THEORY AND DESIGN		<i>Debord, Dérive, New Babylon / Critical Utopias</i>		<i>The 19th Century Modernism and the Roots of Urban Immigration</i>		<i>Industrialization, Infrastructure, Housing</i>		<i>New Humanism Team 10 Postwar Urbanism</i>		<i>New Humanism Team 10 Postwar Urbanism</i>		<i>New Humanism Team 10 Postwar Urbanism</i>		<i>Systems, Supports and Self-Organized Urbanism</i>		<i>Systems, Supports and Self-Organized Urbanism</i>																				
						TITLE OF PROJECT		ABSTRACT WITH IMAGE		ABSTRACT WITH IMAGE		PEER REVIEW OF ABSTRACTS				THICK D OF F																				
OTHER				ALP WORKSHOP 06/14				ALP WORKSHOP 06/28		ALP WORKSHOP 06/28																										
				HOW TO COMMUNICATE URBAN DESIGN IDEAS EFFECTIVELY				HOW TO MEET GSAPP PROFESSORS' EXPECTATIONS		HOW TO MEET GSAPP PROFESSORS' EXPECTATIONS																										

JULY AUGUST

08/09  
LAST DAY OF CLASS  
○  
08/14  
GRADES DUE  
○

WEEK 06							WEEK 07							WEEK 08							WEEK 09							WEEK 10							WEEK 11						
Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su
HARD & SOFT INFRASTRUCTURES							CLIMATE CHANGE							URBAN VITALITY																											
COMMUNICATION							STORYTELLING							COMMUNICATE							ARCHIVING																				
REVIEW 7/08														PRESENTATION							FINAL REVIEW 08/01							ARCHIVE DUE 08/08													
<i>Bringing it all Together in Adobe Premiere</i>							<i>Relational Modeling with Grasshopper</i>																					FINAL REVIEW 08/09													
<i>From Site to Subject</i>							<i>Resilience &amp; Narrative</i>							<i>Post-production: From a Rough Cut to a Fine Cut</i>														FINAL REVIEW 08/07													
SITE SELECTION DUE: 7/10														DESK CRITS																											
Postmodernism							Urbanism in the Anthropocene							New Urbanism, Smart Growth, & the Rural-Urban Transect							Urban Refuge: The City Under Crisis							FINAL PAPER DUE 08/09													
DESCRIPTION PROJECT														FIRST DRAFT																											
ALP WORKSHOP 07/12																																									
HOW TO WRITE FROM SOURCES WITHOUT COMMITTING PLAGIARISM																																									

# LAB - A4528-1

## DIGITAL TECHNIQUES - DTEQ

FRIDAYS: 10:00 - 1:00

with DTEQ/STUDIO sessions on Thursday afternoons

Office Hours: By Appointment (preferably on Fridays)

### FACULTY:

Carmelo Ignaccolo: [ci2214@columbia.edu](mailto:ci2214@columbia.edu) - Coordinator

Kyle Hovenkotter: [klh2130@columbia.edu](mailto:klh2130@columbia.edu) - Coordinator

Shuman Wu: [sw3036@columbia.edu](mailto:sw3036@columbia.edu)

Jesse Hirakawa: [jh3871@columbia.edu](mailto:jh3871@columbia.edu)

Richard Chou: [hc3039@columbia.edu](mailto:hc3039@columbia.edu) - Teaching Associate

## COURSE DESCRIPTION:

DTEQ introduces representational techniques, skills, and softwares for urban designers. In conjunction with the UD studio, students learn to use digital media as part of the design process, weaving together software platforms, research agendas, and design strategies in smooth, interoperable, and collaborative workflow. The course accommodates individuals at all levels of digital skills.

DTEQ is structured through a series of lectures, labs, and workshops. The class meets on Friday mornings for lectures (approximately 45 minutes) and lab sessions (in studio—approximately 2 hours).

Over the course of the summer semester, students will work extensively with techniques of geospatial analysis in GIS, 3D modelling, and animation within larger design workflows. A list for design software is attached:

- ArcGIS (ArcCatalog, ArcMap, ArcScene) for spatial data exploration and analysis;
- Rhino and Grasshopper for descriptive and generative 3D modeling;
- Adobe Illustrator for illustrations and vector graphics;
- Adobe Photoshop for renderings and raster graphics;
- Adobe Indesign for layouts;
- After Effects for multimedia storytelling with motion graphics;
- Adobe Premiere for video editing.

Thanks to hands-on exposure to different software platforms, students will become familiar with the following concepts essential to design thinking:

- Maps: projecting, symbolizing, calculating data; massing, topography, street features.
- Sites: Zoning, Transit, Land use, demography;
- Visual techniques: buffers, heightfields, gradients, layering;
- Systems: diagramming networks, infrastructures;
- Space: visualization, sections, geometries, materials, lighting, texture mapping;
- Scales: overlays, zooming, locational key guides, nested composite;
- Analysis: overlays, tiles, metrics;
- Transitions: growth, shrink, decay, speed, gradient;
- Point-of-view: camera, zoom, display and shooting mechanics;

### Learning how to learn:

Beyond an introduction to the software, this course is meant to develop a philosophy of self-directed learning. The capabilities of design software platforms are vast and complex, teaching every aspect of these feature-rich tools is infeasible within the confines of a single course, or even an entire program. In addition, designers, typically motivated by conditions specific to a site, seldom use the same tool in the same way. Because of this, designers must equip themselves with the means to discover and develop their own techniques. The final project for the class will require students to invent their own techniques to produce an individual drawing, expanding our collective technical knowledge base.

## COURSE OBJECTIVES:

- Support the studio process and design thinking by cultivating a “workflow” model of practice
- Enable students to use multiple software platforms to address particular design questions
- Enable students to learn at their own pace using self-directed tutorial documentation
- Platforms taught during DTEQ include: Rhino, Grasshopper, ArcGIS, 3DS Max, Photoshop, Illustrator, InDesign, V-Ray.

In addition, the course will focus on “interoperability,” or how students can leverage multiple software platforms to produce ideas, spaces, and representations. Each assignment engages more than one software, and focuses on producing deliverables across many platforms. The use of multiple software platforms and representational media will allow students to address both material and immaterial design concerns confronting the contemporary city.

## COURSE REQUIREMENTS:

- Mandatory attendance at all lectures / labs.
- Completion of the DTEQ/Studio assignments.
- Completion of the DTEQ final assignment.
- Completion of required archiving

## FINAL ASSIGNMENT: SIGNATURE DRAWING:

The final DTEQ assignment asks students to individually create a signature drawing featuring a technique of their own invention. Students can choose to take any drawing(s) they have made for studio throughout the semester and revise it to produce a unique, exhibition quality drawing. This drawing is to be 24” x 24” and can be of mixed media. The drawings will be exhibited during a final review on August 9. Location of the final review pin-up will be announced by email a week before the review.

## GRADING:

In DTEQ, creative uses of GIS data and demonstrating a content-rich range of 2D and 3D visualization techniques consistently while engaging in group work will qualify for a high-pass grade. Multiple absences may result in hindering individual skills learning and affect group collaboration efforts. This may result in a low-pass grade or a failing grade. Consult the GSAPP student handbook for grading and program requirement policies.

## EVALUATION CRITERIA:

- 10% Class participation and engagement in topics
- 25% Visual Representation of Studio Assignment 1 (Site construction)
- 25% Visual Representation of Studio Assignment 2 (Design exploration)
- 40% Final assignment for DTEQ

## **DTEQ ARCHIVE:**

You are responsible for archiving your work after the DTEQ final review. Please make sure to include the final product (both in PDF and TIFF format) as well as all original editable files included therein (for example the InDesign/Illustrator package). Please make sure that no files are corrupt and that they are downsized to the greatest possible extent without losing quality.

Please refer to the following archive naming convention:

Master\_CourseType\_TermYear\_CriticsLastNames\_StudentsName\_StudentsSurname.ext

Example:

UD\_DTEQ\_SU19\_IgnaccoloHovenkotter\_Harry\_Potter.tiff

### **DTEQ Archive schedule:**

**Final Review Aug 09**

**Archive due Aug 12 by 11:59pm**

You will not receive a final grade unless your complete semester work is archived.

# GSAPP GRADE POLICY

All students registered in the GSAPP are graded as described below:

- HP (high pass) = a superior level of work
- P (pass) = an acceptable level of work
- LP (low pass) = work that meets minimal standards
- F (fail) = work that is unsatisfactory

**INCOMPLETE:** The mark of INC is not used except in the case in which a student officially documents an illness. To qualify for the INC, the student must also have satisfactorily met all the requirements for a course until the onset of the illness. The INC is awarded at the discretion of the course professor. Authorized Incompletes must be changed to a final grade by the first day of registration for the following term. Any INC that has not been removed by the instructor by the relevant deadline will automatically turn into the grade of F. This grade cannot be changed to Pass; if the course is a required course, it will have to be repeated.

**UNOFFICIAL WITHDRAWAL:** The mark of UW is assigned to students who miss more than three required classes (or whose names appear on the grade sheet but who have discontinued attendance). A class for which a student receives a UW does not count towards the degree.

**ACADEMIC STANDING:** Students receiving a grade of F in any design course, or more than one F in non-design courses, will be asked to withdraw. Although consideration is given to particular cases where a student's work has suffered because of illness, the student may be required to take additional work to demonstrate that he or she has overcome the problems that have resulted in a poor record. A student with more than two non-passing grades is not considered to be in good academic standing. A limit is placed on the number of Low Pass (LP) grades permitted for credit toward a student's degree. For the MS AUD program: No more than two LPs are permitted in the Design sequence and no more than three LPs in the entire program.

## GRADE APPEALS AND GRADE CHANGES

The awarding of grades and all other academic evaluations rests entirely with the faculty. If students have a concern relating to a particular grade or other assessment of their academic work, the student first should speak with the instructor of the class to understand how the grade or other evaluation was derived, and to address the student's specific concern. If students do not feel comfortable speaking with the class instructor about the matter, they should then bring the issue to the attention of their program director or assistant director.

If the students are unable thus to resolve the matter to their satisfaction and believe that a procedural issue is involved, they should bring the matter to the attention of the Assistant Dean of students. The Assistant Dean of students will work with the student and the faculty to determine whether there has been a procedural breach and if so, take immediate steps to remedy the matter. If the Assistant Dean, together with appropriate faculty other than the instructor, decides that there is no need for further action, the student will be informed and the decision will be final. After grades are posted, students may not submit additional work in order to elevate a grade.

# DIVERSITY AND INCLUSION:

[Modified from Columbia university's non-discrimination statement and policy]:

Our studio is committed to providing a learning, living, and working environment free from unlawful discrimination and harassment and to fostering a nurturing and vibrant community. Especially in an internationally and culturally diverse group like ours, it is important that we acknowledge and celebrate our differences, and always treat each other with respect.

We will also make an effort to respect one another's individuality in our forms of address, which includes learning one another's preferred names and pronouns. If you experience anything in the classroom that undermines these values—or if there is anything we can do to better cultivate inclusivity and respect—please feel free to let the studio coordinators know.

It is the policy of the university not to tolerate unlawful discrimination or harassment in any form and to provide those who feel that they are victims of discrimination with mechanisms for seeking redress. Columbia university prohibits any form of discrimination against any person on the basis of race, color, religion, sex, gender, gender identity, pregnancy, age, national origin, disability, sexual orientation, marital status, status as a victim of domestic violence, citizenship or immigration status, creed, genetic predisposition or carrier status, or unemployment status.

COLUMBIA  
**GSAPP**

 COLUMBIA | URBAN DESIGN