## **Digital Modeling for Urban Design (DMUD)**

CourseNo: ARCHA4528 001 2014 2

Meeting Time: T 04:00P-06:00P Meeting Location: AVERY HALL 114

Instructor Information:

Phu T. Duong, Kroner, David Christopher

Teaching Assistant Information:

Sagi Golan

This course serves as an introduction to fundamental techniques for urban design representation that focuses on the nature of how urban designers think, make, work, and communicate. The primary objective is to provide an entry point into digital software that explores current modes of representation for contemporary urban design practice. Digital Modeling for Urban Design (DMUD) approaches visualization as both a descriptive and generative process. By understanding design through this frame, students are offered opportunities to discover the relevance of cartography, aerial photography, and datascapes as they relate to the physical spaces of the city. By using one program for modeling, animation and special effects, students are asked to study the urban systems of New York City at multiples levels of socio-cultural, environmental, economic, and political effects as they are experienced in New York City's five boroughs.

DMUD course runs in conjunction with the cinematic content framed by Reading New York Urbanism seminar. At the start of the term digital seminars will share the same geographic study areas as UD Summer Studio. In this course you will visualize various urban conditions through 3d digital modeling and animation completed in Autodesk Maya. By the end of the semester you should expect to gain an effective cross-program workflow in addition to establishing a sense of control when using static 2d vector formats and 3d modeling with animation. DMUD will prepare you for other advanced digital courses in the fall and spring terms at the GSAPP.

## **RNYU and DMUD Semester Schedule 2014**

01 RNYU H 05 Cinematic/Theme Development Issue Ex A

GEO 1: geometries & projections, online resources Issue reading

02 DMUD T 10 MOD 1: City Traceries | Neighborhoods Issue Ex 1

RNYU H 12 Film 1: Cinematic/Theme Dev. Camera + video Post: Ex A, Issue Ex B

GEO3WS(Juan) F 13 Selection, Extraction, Symbology

03 DMUD T 17 MOD 2: Urban Systems | Infrastructure Post Ex 1, Issue Ex 2

RNYU H 19 Film 2: Composition and Editing, layers/ecologies Lecture: Natasha Jen

GEO5WS(Juan) F 20 Census + 311 data, Joining

04 DMUD T 24 MOD 3: Urban Details | Intersections Post Ex 2, Issue Ex 3

RNYU H 26 Film 3: Editing & time cntrl, Temporalities, Storytelling Lecture: Ian Harris

GEO 2: Overview and Handling

GEO 4: wrangling data sources, reprojection Post Ex B, issue Ex C

05 DMUD T 01 MOD 4: Urban Surfaces | Structure and Skins Post Ex 3: Systems

RNYU H 03 Film 4: Notation, animation, exporting.

Desk crits for DMUD/RNYU midterm

06 DMUD T 08 DMUD/RNYU MIDTERM

RNYU H 10 Thesis and research development Issue Ex D

Film 5: Narrative Developm't & Storyboard Guest Lecture TBD

07 DMUD T 15 MOD 5: Urban Apparatus Issue Ex 4

RNYU H 17 Desk Crits with Storyboard Post Ex D, Issue Ex E

GEO7WS(Liz) F 27 Integrate with Maya workflow

08 DMUD T 22 MOD 6: Terrains and Buildings | Workflows Post Ex 5, Issue Ex 5  $\,$ 

RNYU H 24 Film 6: 3d Camera Matching Post Ex E

09 DMUD T 29 MOD 7: Dynamic Speculations Post Ex 5

RNYU H 31 Rough Cuts

GEO 6: create, edit, interpolate Guest Lecture TBD