

Lucy Yuan

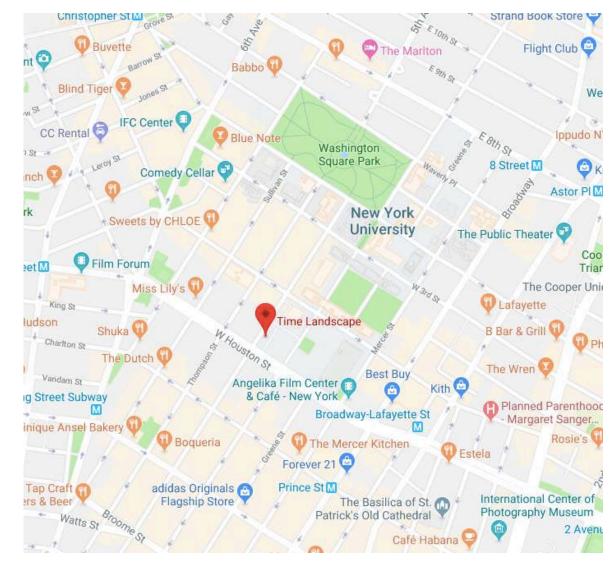
Environmental Design: Professor Phifer

LOCATION

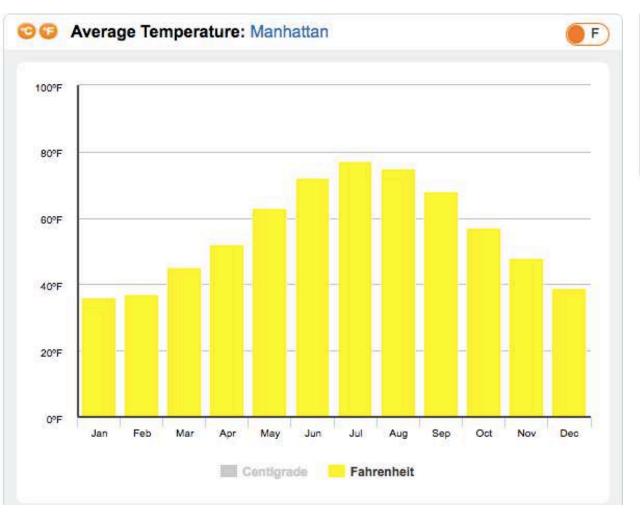




LOCATION



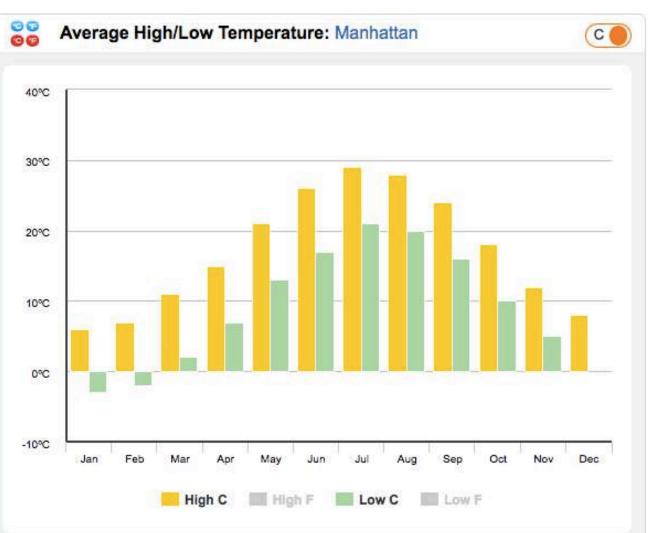




	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
°C	2	3	7	11	17	22	25	24	20	14	9	4
°F	36	37	45	52	63	72	77	75	68	57	48	39

- Hottest month is July at 77°F
- Coldest month is January at 36°F





	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High °C	6	7	11	15	21	26	29	28	24	18	12	8
High °F	43	45	52	59	70	79	84	82	75	64	54	46
Low °C	-3	-2	2	7	13	17	21	20	16	10	5	0
Low °F	27	28	36	45	55	63	70	68	61	50	41	32



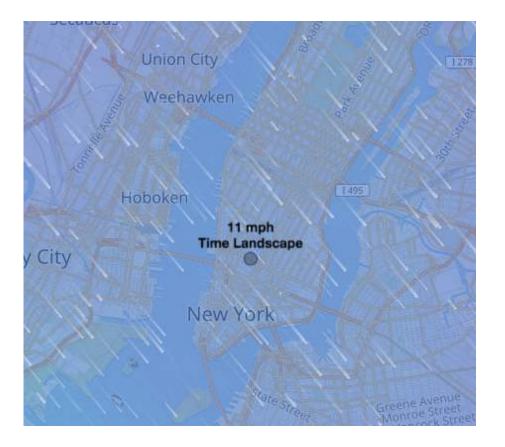
Average Rainfall: Manhattan 150mm 30d 125mm 25d 100mm 20d Rainy days Rainfall 75mm 15d 50mm 10d 25mm 5d 0mm 0d Jul Aug Sep Feb Mar Apr May Jun Oct Nov Dec Jan Average rainfall Average rain days



- 47.2 inches of rain on average annually
 - U.S average is 38.1 inches
- 25.8 inches of snow on average annually
 - U.S average is 27.8 inches



May 11th, 2019





8:00 AM \rightarrow NW to SE

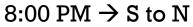
8:00 PM \rightarrow Mostly S to N



June 21st, 2019



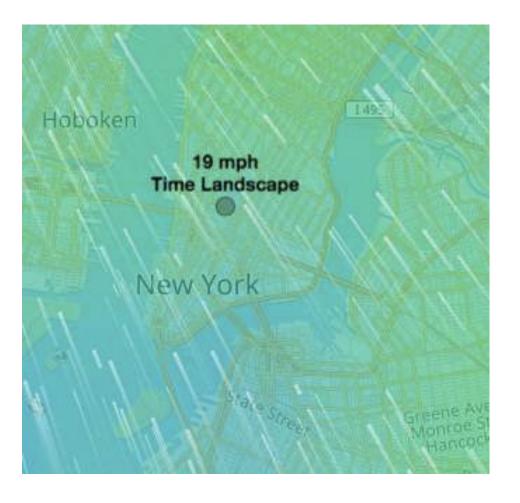


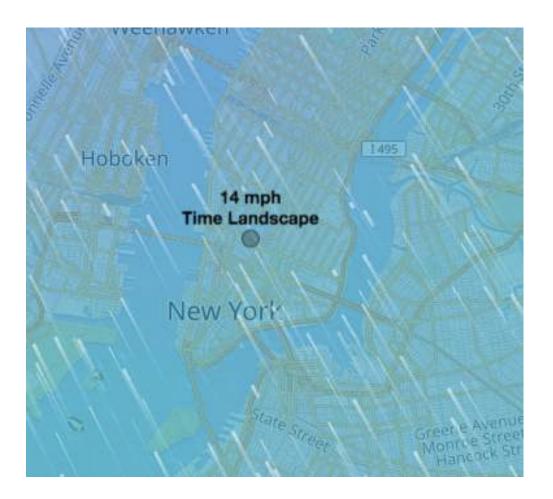




8:00 AM \rightarrow N to S

December 21st, 2018







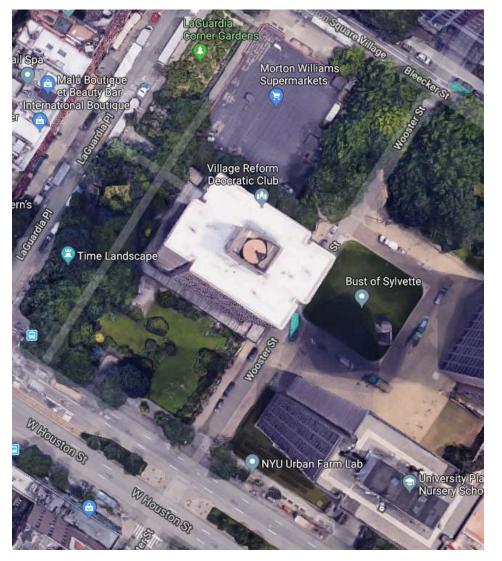
8:00 AM \rightarrow SE to NW

8:00 PM \rightarrow SE to NW

- May 11th, 2019; 12:00 PM
 - Daylight duration: 14 hours, 7 minutes, 39 seconds
 - Sunrise: 5:43 AM
 - Sunset: 8:01 PM
- June 21st, 2018; 12:00 PM
 - Daylight duration: 15 hours, 6 minutes, 34 seconds
 - Sunrise: 5:24 AM
 - Sunset: 8:31 PM
- December 21st, 2018; 12:00 PM
 - Daylight duration: 9 hours, 15 minutes, 55 seconds
 - Sunrise: 7:16 AM
 - Sunset: 4:31 PM



STTE



- Corner of La Guardia Place
 and W. Houston Street
- East of Time Landscape
- South of I.M. Pei tower

N

• N 40°43'36", W 73°59'56"



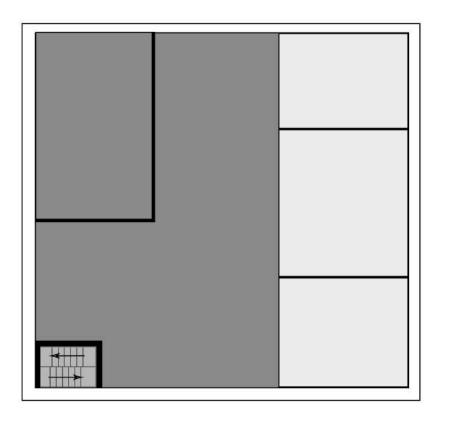
STTE



- Total site area: 16,027 sqft
- Total building area: 10,408 sqft
- Black rectangle indicates building location
- Tan rectangle indicates outdoor courtyard area



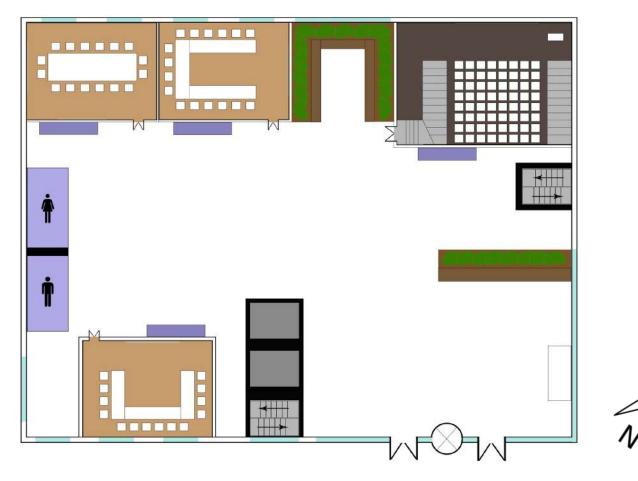
Basement



- This is where the mechanical stuff is kept
- Geothermal tanks
- Plumbing systems
- Electricity system/grid such as power and internet connection



lst Floor



- Bottom left part of the floor is the main lobby
- All the white open space is mainly for gallery/exhibition space where companies and students could showcase their work
- This floor has 2 elevators and 2 staircases
- There is a lecture hall and 3 classrooms



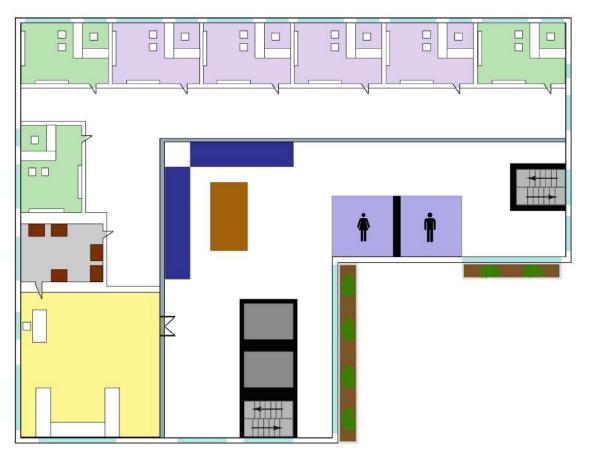
2nd Floor



- Small balcony like area overlooking the lobby with plantings
- Another lecture hall and classroom
- Printing lab connected to the study lounge (with computers provided)
- Reference library



3rd Floor



- Small balcony like area like the floor below
- Offices for professors and administrative staff
- Printing room for professors and staffs
- Lounge area where students and other people could wait before meeting with professors or staff
- Offices are surrounded by a glass wall
- Seating area outside the offices



Roof



- Bottom left corner has a glass area for skylight to travel down to the lobby
- High glass wall surrounding the perimeter with safety guard in front of it in order for students to be allowed up on the roof
- Solar panels located on the roof
- Small path in order for students to not walk on the plants
- Add plants that are native to New York City so it is easier to take care of



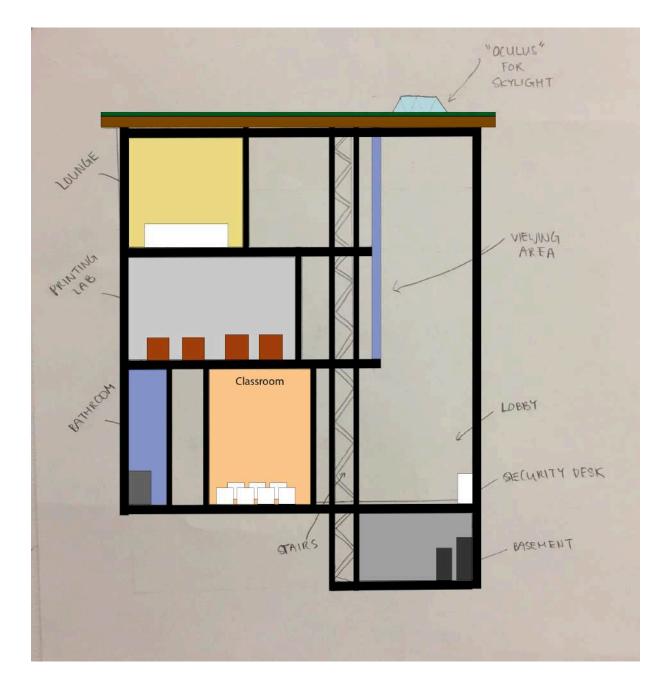
GREEN ROOF





VIEW

Section Plan





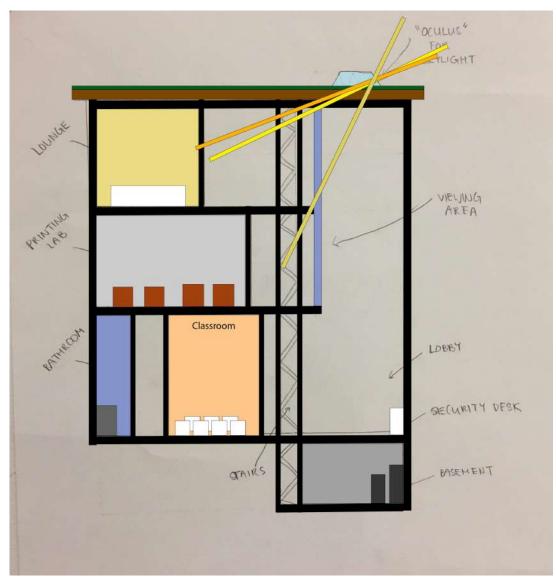
VIEW

Front Facade





SUN ORIENTATION



- Bright yellow: May 11th, 2019, 12:00 PM at a 64.33°
- Orange: June 21st, 2018, 12:00 PM at a 68.89°
- Darker yellow: December 21st, 2018, 12:00 PM at a 25.86°
- During December the sunlight will warm up the lobby from the skylight
- With the other windows in the building, the sun would be able to reach inside it.



DESIGN INSPIRATION



- Outdoor courtyard idea
- Can see into the glass building



DESIGN INSPIRATION





- Tinted glass to limit glare
- Thick windows in order to prevent cold air from entering into the building at unwanted times (during the winter)

