The class as a micrography of the professional space: Teamwork and Professional portfolio curation.

*Capstone Courses and Career Preparation*

A. Case study_Project Description

B. Learning Goals_High Impact Educational Practices

C. Reflections
A. Case study_Project Description

Bustling Vacancy_Mapping “behavioral” city patterns to produce architectural space.

Course: ARCH3609_Integrated Software in the Architectural Office
architectural scale

urban analysis

data abstractions_rules
alphabet
3 main architectural elements

data & syntax
NYC behaviors / patterns

composition
open air experiential space

Jason Ng. Diagram made by student visualizing the process steps for the integration group project
“Alphabet” stage

“Data” stage

“Syntax” stage

“Composition” stage
4 Process Steps

- “Alphabet” stage
CASE 01: STAIR
01. Anthropogenic Brutalist
02. Planar Geometry
03. Angular
04. Stacking
05. Elasticity
06. Liquid Geometry

CASE 02: ATRIUM
01. Bud Swell
02. Sting Ray
03. Plunging Breaker
04. Unassisted Nucleation
05. Assisted Nucleation
06. Surface Tension

CASE 03: CORRIDOR
01. Asphecus
02. Trachea
03. Deconstructivism
04. Kelp Swell
05. Convergent Evolution
06. Sea Anemone Skeleton

CASE 04: WALL
01. Horizontal Ribbing
02. Paneling Type 1
03. Paneling Type 2
04. Erosion
05. Paneling Type 3
06. Nesting

Architectural Elements Studies
<table>
<thead>
<tr>
<th>CASE 0.1: ARMS</th>
<th>01. TESSELLATE</th>
<th>02. TAILS</th>
<th>03. TESSELLATE 3D</th>
<th>04. LADDER</th>
<th>05. CARVED</th>
<th>06. MIRRORED</th>
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</thead>
<tbody>
<tr>
<td>CASE 0.1: STAIRS</td>
<td>01. FOLDING</td>
<td>02. FIRMAL</td>
<td>03. CROSS-SECTION</td>
<td>04. X-AXIS</td>
<td>05. MESH</td>
<td>06. LINES</td>
</tr>
<tr>
<td>CASE 0.1: WALLS</td>
<td>01. CAVES</td>
<td>02. EXPLODE</td>
<td>03. STALAGMITE</td>
<td>04. CURVY</td>
<td>05. CAVES</td>
<td>06. BRANCHING</td>
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ARCHITECTURAL ELEMENTS STUDIES
4 Process Steps

- “Alphabet” stage
- “Data” stage
4 Process Steps

- “Alphabet” stage
- “Data” stage
- “Syntax” stage
Here we have horizontal circulation. This represents train lines that didn't meet with the A line at that point. This gave the design a lower level of circulation.

These moments represent vertical circulation. They were specifically placed where intersections of train lines happened. This gave the design height.

The boxes represent the four boroughs. The boxes are placed on different levels based on the annual ridership data. Each level gives you a different view of the site. The main box being Manhattan gives you the overall view of the whole site.

Plan View

Step 1: Horizontal Circulation

Step 2: Vertical Circulation

Step 3: Viewing Points

Step 4: Exploded Axon View

Front Axon View

Side Elevation

By merging all 3 elements we were able to come up with our final design. Using the three elements that we extracted from our data research we were able to get what we set out for and that was hierarchy.

IN AND OUT FLOW
4 Process Steps

- “Alphabet” stage
- “Data” stage
- “Syntax” stage
- “Composition” stage
IN AND OUT FLOW
B. Learning Practices

Capstone Courses and Career Preparation
<table>
<thead>
<tr>
<th>Learning Goals</th>
<th>HIP and Gen. Education SLOs</th>
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<tbody>
<tr>
<td>1. Portfolio</td>
<td>Capstone courses &amp; Career Preparation</td>
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<td>2. Collaborative work</td>
<td>Collaborative assignments and projects</td>
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<tr>
<td>3. Integration of specialized software into all aspects of the architectural</td>
<td>Capstone courses &amp; Career Preparation</td>
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<tr>
<td>profession.</td>
<td></td>
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<tr>
<td>4. Develop research, analytical and compositional skills.</td>
<td>Undergraduate research Gen. Education Student Learning Outcomes</td>
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<tr>
<td>5. Frequent Presentations</td>
<td>Place Based Learning</td>
</tr>
<tr>
<td>6. Online Exhibition of students work</td>
<td>Open Digital Pedagogy</td>
</tr>
<tr>
<td>7. Continuation past the class period</td>
<td>Gen. Education Student Learning Outcomes Acquire tools for lifelong learning</td>
</tr>
</tbody>
</table>
1. Collaborative Work
2. Individual Portfolio

A. Physical book

B. Eportfolio - OpenLab - Archinect - Issuu
3. **Integration of specialized software into all aspects of the architectural profession**

Classroom simulates the office space complexity
4. Develop Research, Analytical & Compositional skills
GIS_Geographic Information System

https://nycopendata.socrata.com/
http://nyc.pediacities.com/Nycpedia
http://wirednewyork.com/forum/
http://data.fabernovel.com/nyc-subway/
http://flowingdata.com/
http://viz.ged-project.de/
5. Frequent Presentations
Assessment

Rubric on Oral Communication:
Organization
- Ability to collaborate and present successfully as a group a highly sophisticated project.
- Professionality in presentation and meeting the given deadlines.
- Followed layout and visualization instructions for the project.
Quality of Supporting Material:
- Neatness and accuracy of the visuals.
- Quality of written description.
- Quality of city data analysis and data interpretation.
- Quality of final design as defined by the constraints set by the city data each team is analysing.
Delivery
- Quality of oral presentation. The presentation techniques, speech and posture as well as coordination btw the group members are appropriate and appealing.
- Quality of plotted boards (nicely cut, pinned and in great resolution).

Rubric on Weekly Digital Submissions:
- followed instructions and submission on time
- file composition
- file neatness & accuracy,
- file line weights & resolution
- file presentation.
6. Online Exhibition of students work

plbny.com

openlab.citytech.cuny.edu

Assignments

ARCH3609_F13_A01
ARCH3609_SP14_A02
ARCH3609_SP14_A03
ARCH3609_SP14_A04
ARCH3609_SP14_A05
ARCH3609_SP14_A06
ARCH3609_SP14_A07
ARCH3609_SP14_A08
ARCH3609_SP14_U01
ARCH3609_SP14_A09
ARCH3609_SP14_A10
ARCH3609_SP14_A11
ARCH3609_SP14_U02
ARCH3609_SP14_A12
7. Continuation past the class period
C. Reflections

Visual downloaded from the USF webpage.
http://www.coedu.usf.edu/main/IE/InterdisciplinaryEd.html
Connection to different disciplines

ARCHITECTURE

URBAN DESIGN
data visualization

LIBERAL ARTS

SOCIAL SCIENCES

MATHS
DISCUSSION & QUESTIONS

We are happy to continue the discussion further. Your feedback is highly appreciated.

Please contact us at:
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SAfonso@citytech.cuny.edu

CUNY, City College of Technology, Department of Architectural Technology