



## teaching PORTFOLIO

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**Howard University**





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Thesis Preparation focuses on the research protocols, analytical techniques, theoretical constructs and practical constraints associated with Architectural Thesis inquiry.

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This course provides students with a framework to assess different urban and built environments from health and wellbeing viewpoints.

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This course equips students with an understanding of the foundational ideas, techniques and strategies in designing cities and the built environment

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A formal review process to assess teachers' performance and effectiveness in the classroom

diversity

inclusive

c u l t u r e

communities of

c o l o r

inter-

active

e v i d e n c e  
b a s e d

contextualize

participatory  
learning

environmental  
d e s i g n



## Pedagogical Philosophy 01

My **pedagogical philosophy** is grounded on hands-on learning by integrating the design studio and theory courses with an **inclusive culture**. Being primarily trained as a professional architect, and having extensive experience in academia, studio teaching, and research, my pedagogy integrates facets of **diversity**, community **health-well-being**, and **evidence-based** environmental design with unique, interactive strategies to **enhance learning**.

My first teaching aim is to develop **interactive** and **action-based** studio learning that focuses on environmental design. My definition of **interactive** means assisting students to relate to and **contextualize** with the facts delivered in their current design studios/lectures. Through my courses and design studios, I promote health and well-being in the **built environment** and present concepts of the **paradigmatic shift** in architectural practice to encourage students to hone their design philosophy. I believe in the benefits of both independent and team learning, especially with teaching at an undergraduate and graduate level. The two facets of architecture: **environment and design**, should be well integrated within students' design studio experience to help them make **sybiotic interconnections** between design and practice. In my teaching, I have focused on linking the development of students' skills in visual and verbal representation, **spatial thinking**, and **tectonics** with their ability to observe, understand context, and critically analyze the process of design inquiry among broadly **diverse students** regardless of their color, gender, race, ethnicity, nationality, sexual orientation, and religion.

My other strong pedagogical stance – **evidence-based participatory learning** – takes root in encouraging students to study specific action-based phenomena that will assist them in connecting their design studio experience within a broader **socio-cultural** reality. By weaving a critical **interdisciplinary** approach to the built environment, my pedagogical goals involve promoting **reconciliation** of the **schism** between the subjective boundary of the discourse and its social and **environmental responsibilities**. Socio-cultural agendas influence my teaching as I integrate Design, Health, and Built Environment into a broader, interdisciplinary design inquiry. My pedagogical philosophy is thus precisely founded on **evidence-based participatory learning** that encourages students to reassess the social, cultural, and environmental aspects of their design learning.

My course, entitled “Health & Design in Segregated Landscape,” received The History-Makers Award and will use their Digital Archive to examine how urbanization and residential segregation have transformed the minority health and well-being in USA since the 1900s to the present. Students will use case studies, contemporary developments, and best practices to increase minority health and well-being through their work as architects, planners, historians, health care practitioners and within other humanities and professional endeavors.”



## Courses Taught

Fall 2017 to Fall 2021

ARCH 203: Design V

ARCH 204: Design VI

ARCH 891: Thesis Preparation

ARCH 651: Principles of Urban Design

ARCH 430: Health and Design

## Teaching Statement

As a faculty member at Howard University, a historically black college and university (HBCU), I have acquired valuable multicultural and diversified teaching experiences by interacting with the ethnically and culturally diversified African-American community. Students at Howard try to incorporate culturally driven unique design concepts into their work, and I believe these differences stemmed from various ethnic-cultural backgrounds and diverse views. My exposure to these different cultures, in addition to my academic training across multiple countries, beneficially expanded my global views. I was able to use my expanded global views of the

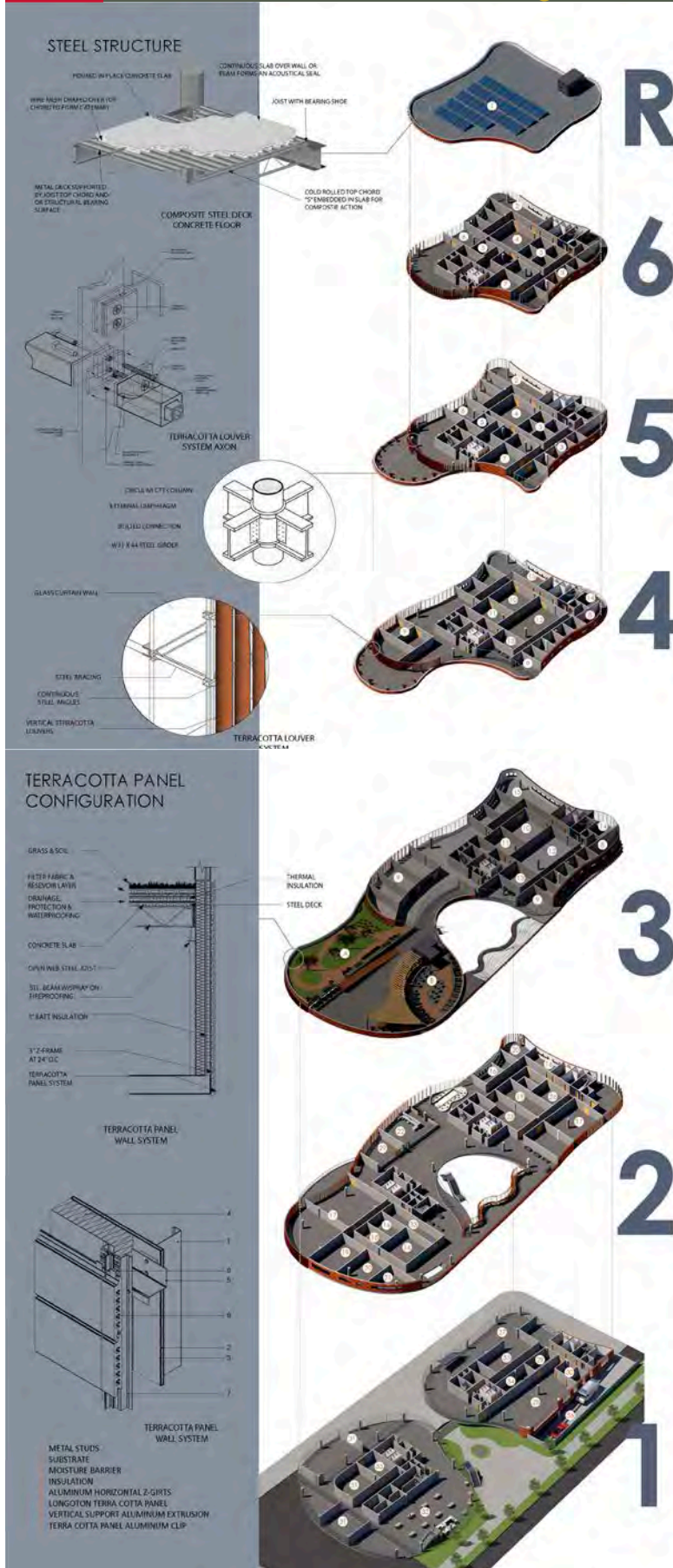
cultural landscape into the classroom to bring new perspectives to the students.

In the comprehensive design studio at Howard University, my student focuses on designing sustainable, healthy communities that incorporate new tools and techniques for retrofitting urban corridors by integrating healthy urbanism, responsive master planning, and environmentally conscious design. In the ‘Thesis Preparation’ seminar course, I prepare the students for thesis pre-design focusing on research methods and design theories. My ‘Health and Design’ course focuses on environmental design and healthy urbanism to improve the physical, social, and cultural health of the community. This course emphasizes harnessing students’ research and design skills to analyze and affect positive changes in the built environment to incorporate community needs. In 2016, I have received a service-learning grant from the University of

Kansas as an accomplishment to successfully teach a service-learning course entitled “Designing Sustainable Future”. In addition, my offered seminar courses, “Sustainable Urbanism” and “Designing Healthy Communities,” have been selected for the multidisciplinary University of Kansas Leadership Certificate Program.

It is my privileged to serve students from different cultural / ethnic backgrounds. I always encourage my students to be aware of global phenomena that will help them contextualize studio learning from a broader perspective of social equity. While teaching, I have focused on linking the development of students’ skills in visual and verbal representation, spatial thinking, and tectonics with their ability to observe, understand context, and critically analyze environmental design inquiry. I would like to continue to implement these unique strategies in future studios and classes.







CENTER  
FOR  
INCLUSIVE  
DESIGN

SHAW+HOWARD U



SITE ANALYSIS



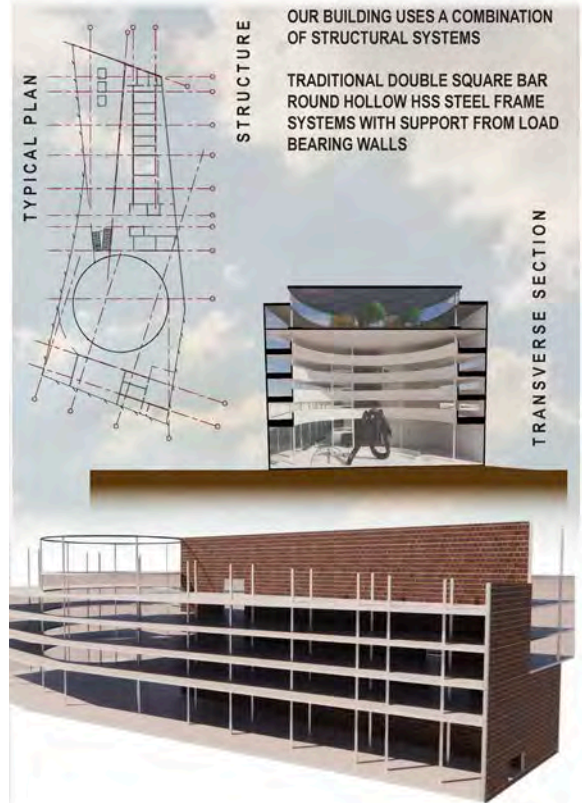
OBJECTIVE

PLACE THE HEALTH AND WELL-BEING OF STUDENTS, FACULTY, AND STAFF AT THE FOREFRONT OF CAMPUS LIFE. WITH THE EXPANSION OF THE HEALTH CENTER PROGRAM AND INCLUSIVE DESIGN CONSIDERATIONS WE WILL REALIZE THE LINK BETWEEN THE COMMUNITY AND UNIVERSITY.

PROGRAM+STRUCTURE

OUR PROGRAM IS CATEGORIZED BY: OFFICES, HEALTH AND WELLNESS, OUTDOOR SPACES, RETAIL, AND EDUCATION

ACCESS TO PHYSICAL AND MENTAL HEALTH PROFESSIONALS, FITNESS CENTERS, AND OUTDOOR ENVIRONMENTS ENCOURAGES MENTAL STIMULATION AND HEALTHY LIFESTYLES. PROVIDING EDUCATIONAL AND WELLNESS SPACES THAT CAN SERVICE BOTH STUDENTS COMMUNITY MEMBERS IS WHAT BRIDGES THE TWO TOGETHER IN AN INCLUSIVE ENVIRONMENT.



TYPICAL PLAN

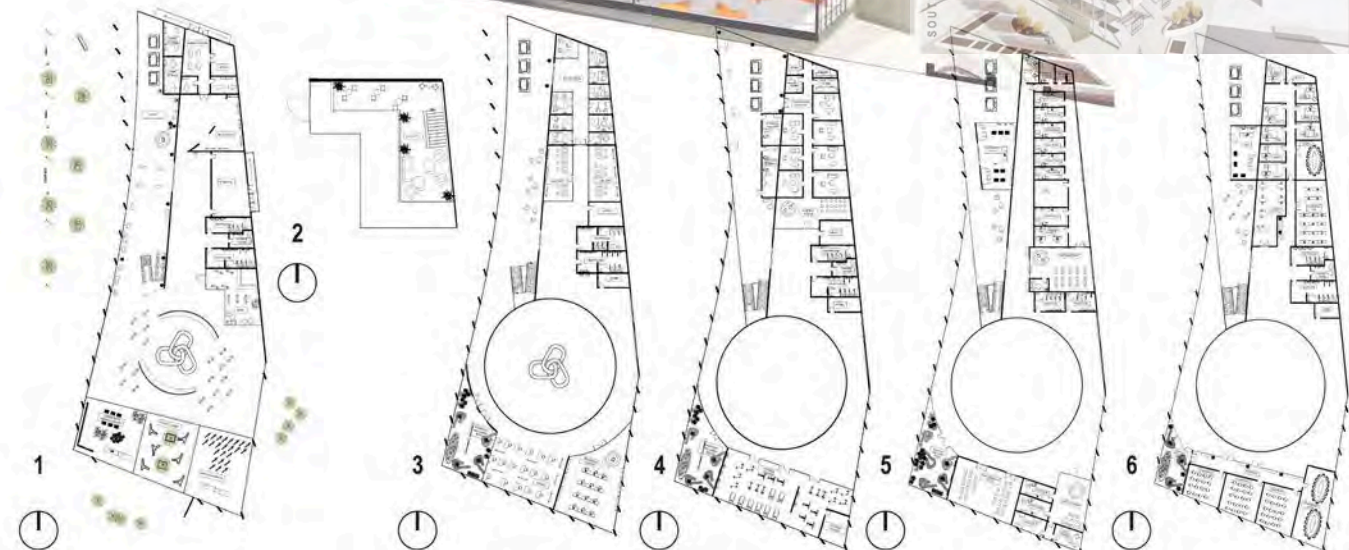
STRUCTURE

OUR BUILDING USES A COMBINATION OF STRUCTURAL SYSTEMS

TRADITIONAL DOUBLE SQUARE BAR ROUND HOLLOW HSS STEEL FRAME SYSTEMS WITH SUPPORT FROM LOAD BEARING WALLS

TRANSVERSE SECTION

3D SECTION



WEST ELEVATION

SOUTH EAST VIEW



# ARCH 204 – Competition Studio

## Urban Food Hubs

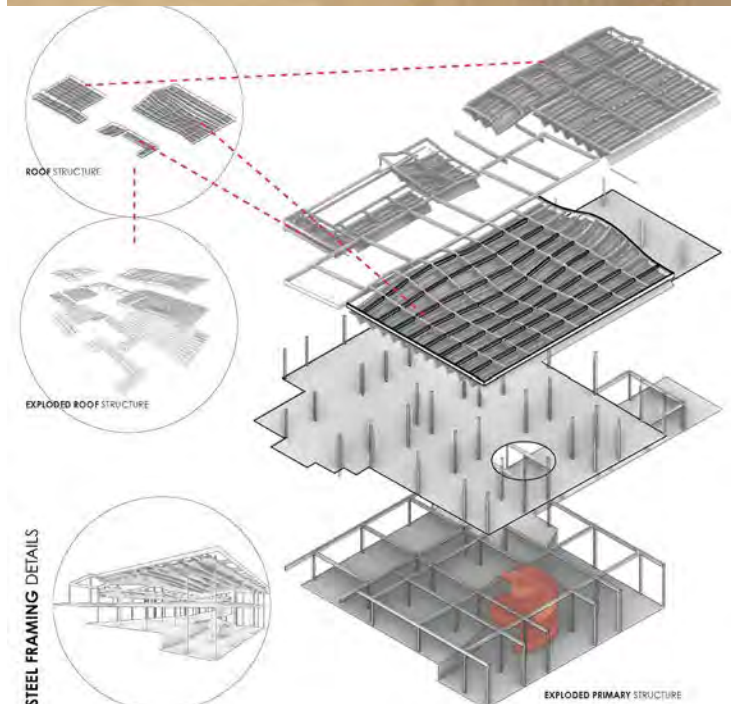
spring  
2019

2019-2020  
ACSA/AISC  
STEEL  
DESIGN  
STUDENT  
COMPETITION

Category I  
Urban Food Hub  
Life of a Steel Building

Category I  
Open

The 2020 Steel Design Student Competition challenges students to design an Urban Food Hub in an urban context. Urban agriculture is a social movement for sustainable communities, where organic growers, foodies, and locavores form social networks founded on a shared ethos of nature and community. Many people are looking for food security, nutrition, and income generation which are key motivations for urban agriculture and local markets. People who live in cities need a more direct access to fresh vegetables, fruits, and meat products through urban agriculture.





## URBAN FOOD HUBS

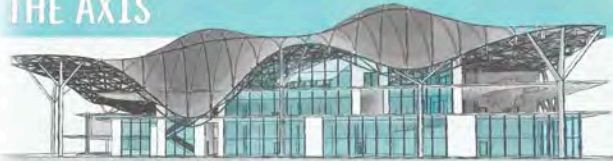
A food hub is a business that manages the processes and services related to locally produced food products to increase its ability in meeting demand. -USDA



The OMA Food hub's program consists of an urban farm, market, food truck plaza, retail space, classrooms, shared community kitchens and a recycling facility.



## THE AXIS



### CONCEPT

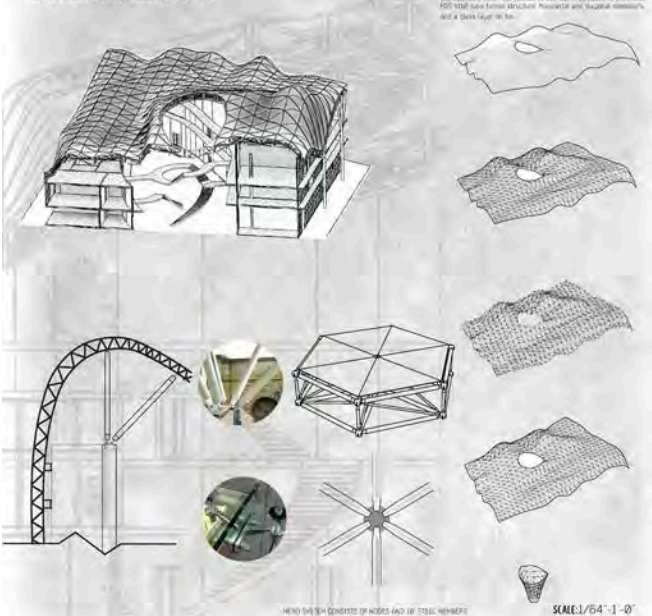
The conceptual form is based on a typical market structure that consists of spaces that are sheltered and joined under a canopy structure. In the same way, this food hub aims to create a multitude of spaces that are united by a single canopy. The program in these spaces aim to foster education, recreation and wellness. In this way, the community can improve its overall health and well being with the amenities provided in the hub.



### PRECEDENTS



### SECTIONAL PERSPECTIVE

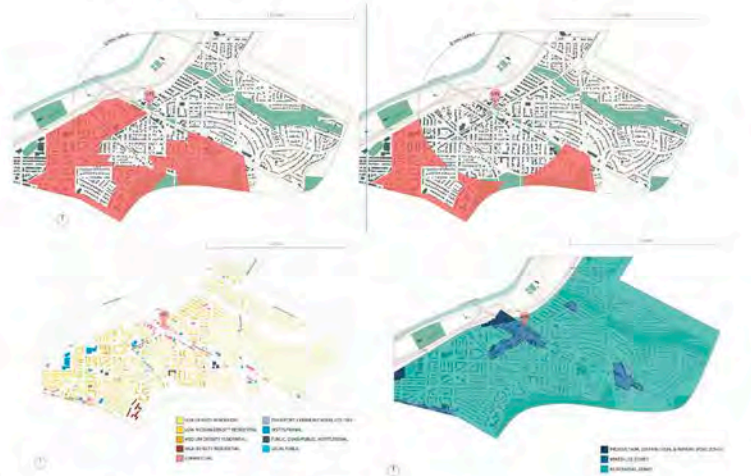


### EXPLODED STRUCTURE

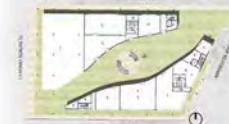
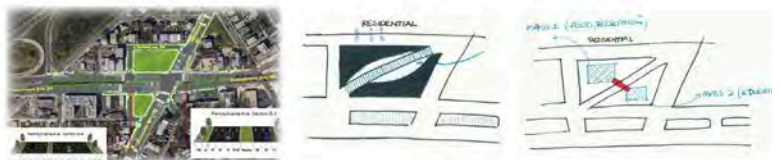
The exploded structure diagram shows the building's form and structure, highlighting the canopy and the spaces it covers.

The USDA defines a food hub as “a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products. Food Hubs are a part of the agricultural value chain model and often share common principles relating to conservation, sustainability, healthy food access, and supporting local farmers.

## FOOD DESERT MAP DC



## SITE STRATEGY



FIRST FLOOR PLAN  
SCALE: 1/64" = 1'-0"

1. food market
2. wellness center
3. restrooms
4. storage
5. offices
6. security
7. retail
8. main lobby
9. bike storage
10. urban plaza



SECOND FLOOR PLAN  
SCALE: 1/64" = 1'-0"

1. storage
2. lounge
3. restrooms
4. restaurant
5. dining
6. teaching kitchen
7. commercial kitchen
8. lobby
9. meeting room
10. workshop
11. multipurpose/learning center



THIRD FLOOR PLAN  
SCALE: 1/64" = 1'-0"

1. storage
2. main lobby
3. restrooms
4. meeting room
5. meeting room
6. meeting room



In this project, student are required to analyze, research, and respond on reconnecting the two prominent and diverse buildings at Howard Campus, and exploring the ideas of creative place making, incorporating community needs, reconnecting the urban fabric and redesigning the existing two buildings in a more sustainable way. By focusing on the concept of 'creative placemaking', The new building will serve as a bridge to connect the Mackey and Downey buildings and will also provide needed new spaces to accommodate the growing college population.





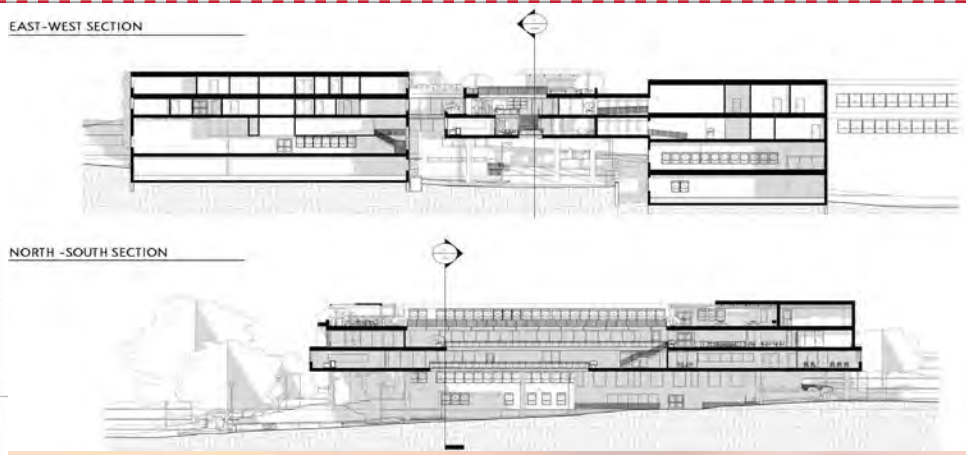
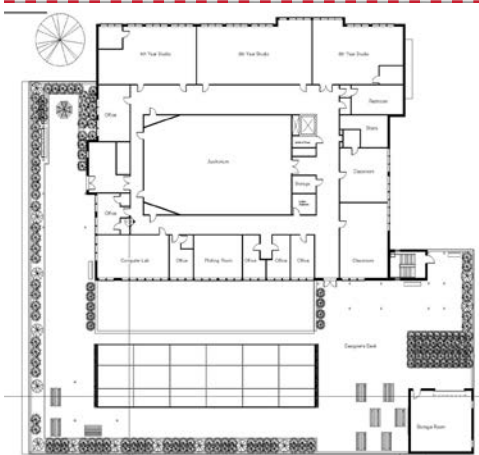
The studio focused on [Re] Connecting the Creative Community Corridor by integrating the concept of ‘creative place making’, ‘walkable neighborhood’ and ‘healthy community’. Residents and users of this site have requested a livable, walkable corridor which is iconic, serves as a gateway and at the same time could support artistic streetscape for the community. This project will be a model for campus design and neighborhood change at the heart of Nation’s capital, showing how a city can embed creative place making by incorporating Urban Design at the outset of infrastructure development.



SECOND FLOOR PLAN

EAST-WEST SECTION

NORTH-SOUTH SECTION



EAST-ELEVATION



WEST-ELEVATION





# ARCH 204 – Competition Studio

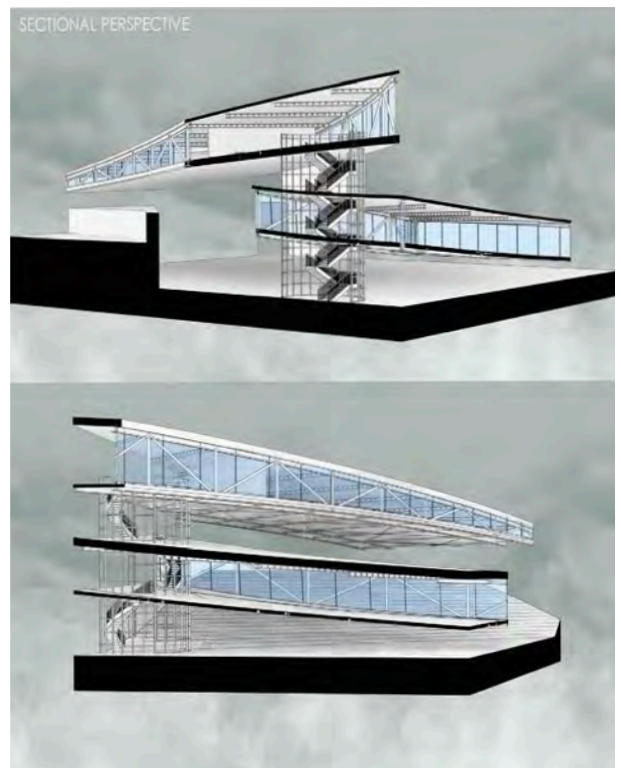
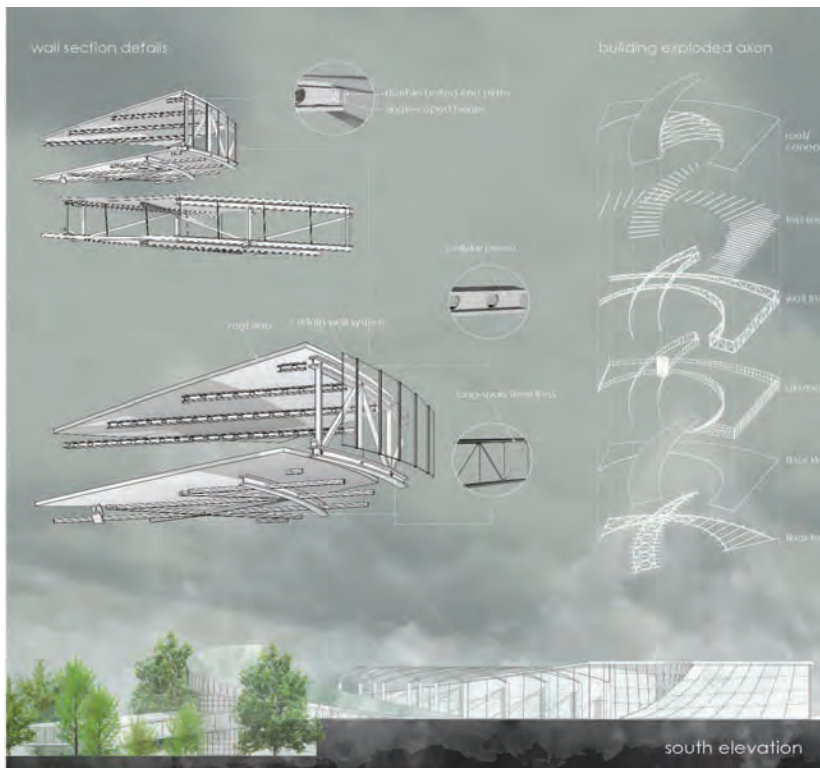
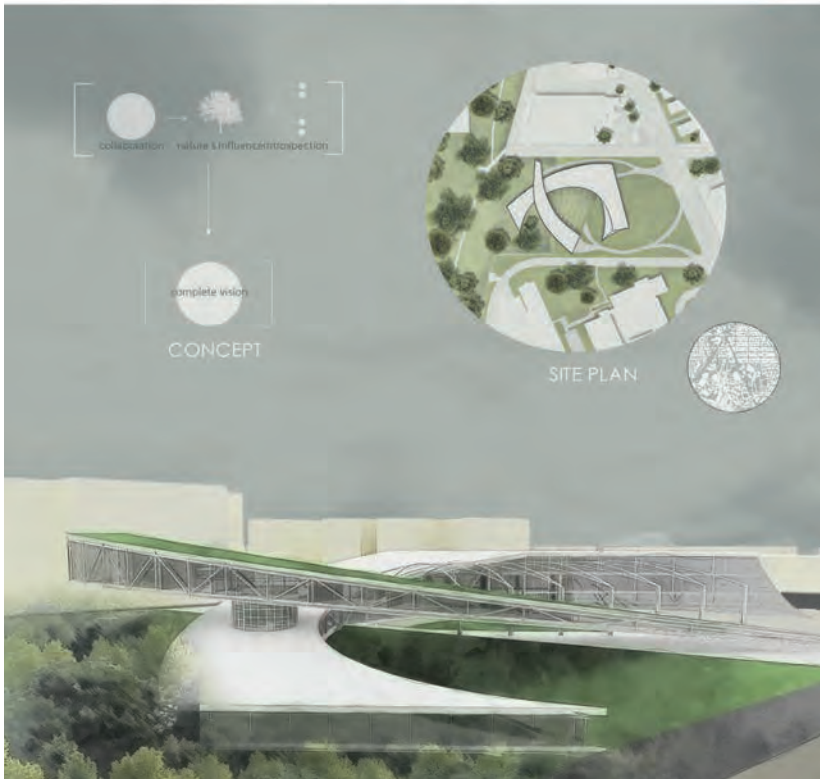
## Designing a Retreat Facility

spring  
18/19

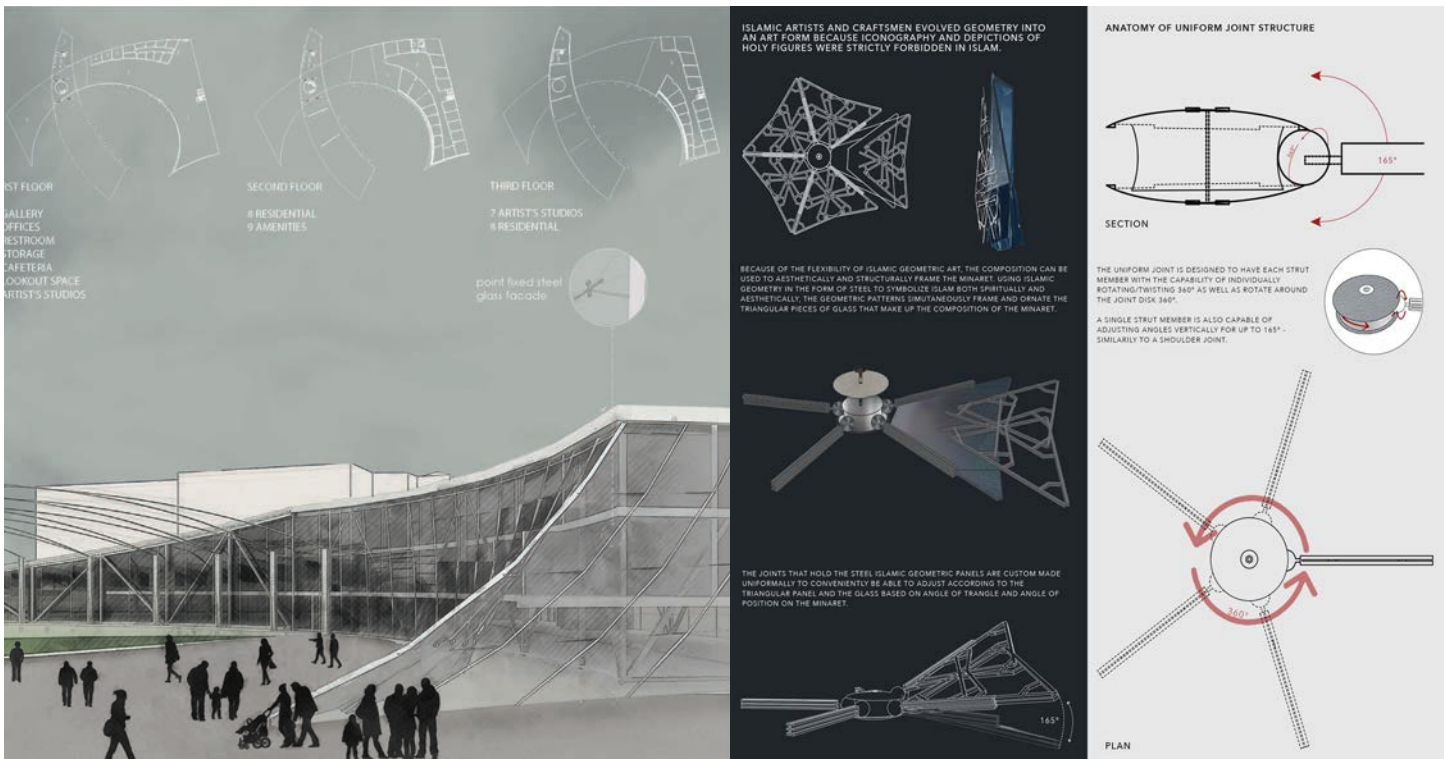


The **Retreat Facility** was designed by keeping in mind to

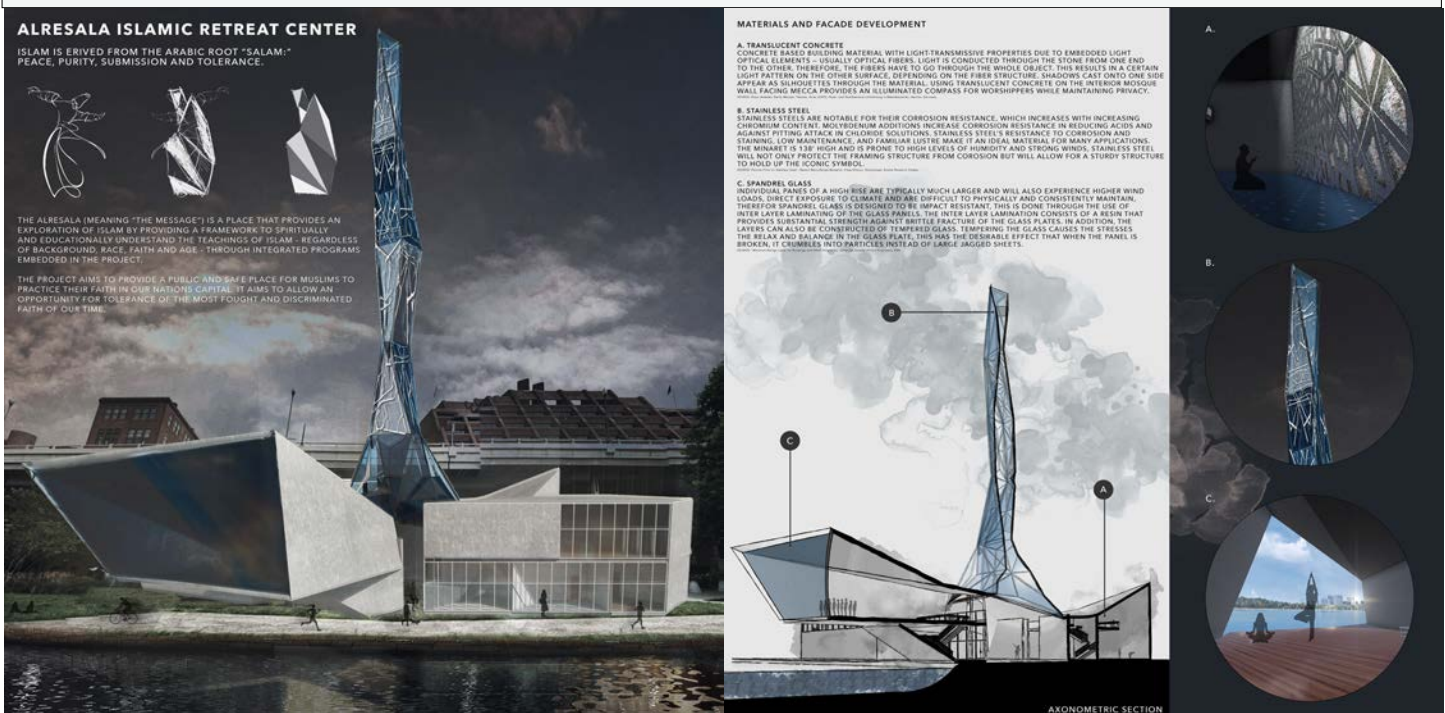
- respect the **ethnically and economically diverse** urban fabric.
- understand urban design principles through **critical thinking**
- explore complex building design and **comprehensive building system**
- examine urban design **case studies and design ideas**
- produce and convey **practical knowledge**







The ACSA Steel Design Student Competition is socially oriented to challenge students to design affordable multi-family housing in an urban context. The need for affordable housing types is on the rise. Populations are moving back to the city, realizing the cost of living, required commuting, and range of quality-of-life options afforded by living near the urban core. Not only for those who have a choice to live in denser environments, but also for low-income populations, housing must be affordable. Today's housing problems are difficult, but architects are in a unique place to envision innovative solutions to the housing crisis that affects so many. Steel is an ideal material for affordable multi-story housing because it offers the greatest strength to weight ratio and can be designed systematically as a kit of parts or prefabricated to allow for quicker construction times and less labor, thus reducing the cost of construction. Housing built with steel is potentially more flexible and adaptable to allow for diversity of family structures and changing family needs over time.

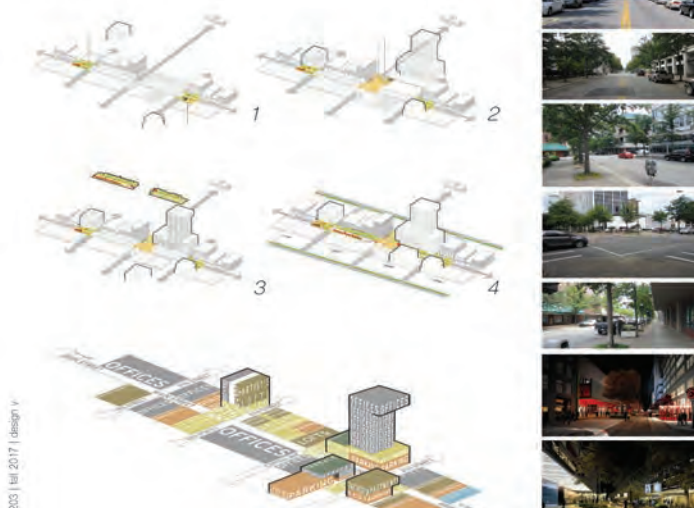




In this studio project, students are required to analyze, research, and respond to DC office of Planning's placemaking initiative by proposing a masterplan and creative community corridor for the diversified community along Georgia Avenue. They explored the ideas of creative place making, incorporating community needs, reconnecting the segmented urban fabric and redesigning the existing infrastructure in a more sustainable way. By focusing on the concept of 'creative place making', students developed and proposed a Masterplan at Georgia Avenue Corridor Washington DC, next to Howard Unieristy Campus.

PHASE I | Precedent Analysis

The Creative Corridor  
Main Street, Little Rock, Arkansas



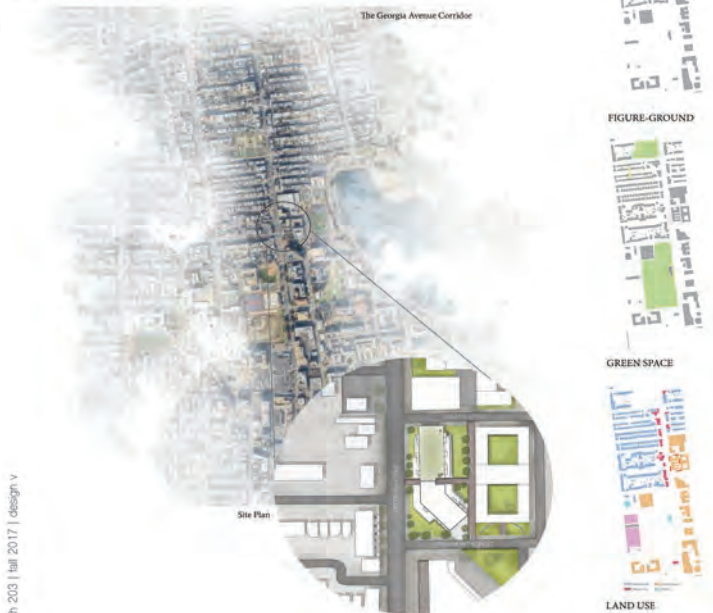
h-203 | fall 2017 | design v

Georgia Avenue  
Columbia Road to Barry Place

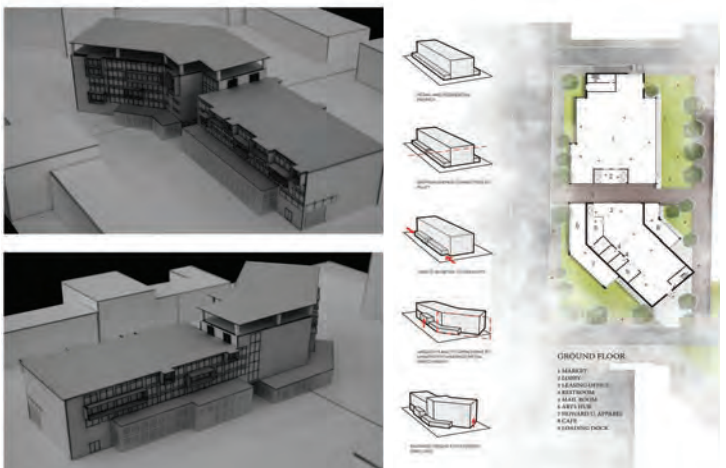


PHASE III | Mixed-Use Development

Architecture as a Gateway  
Columbia Road to Barry Place



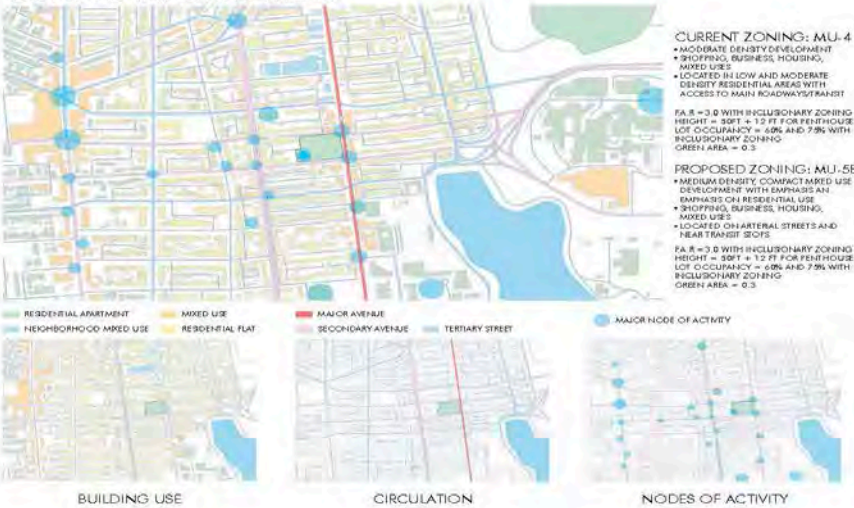
h-203 | fall 2017 | design v



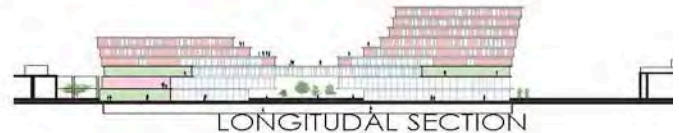




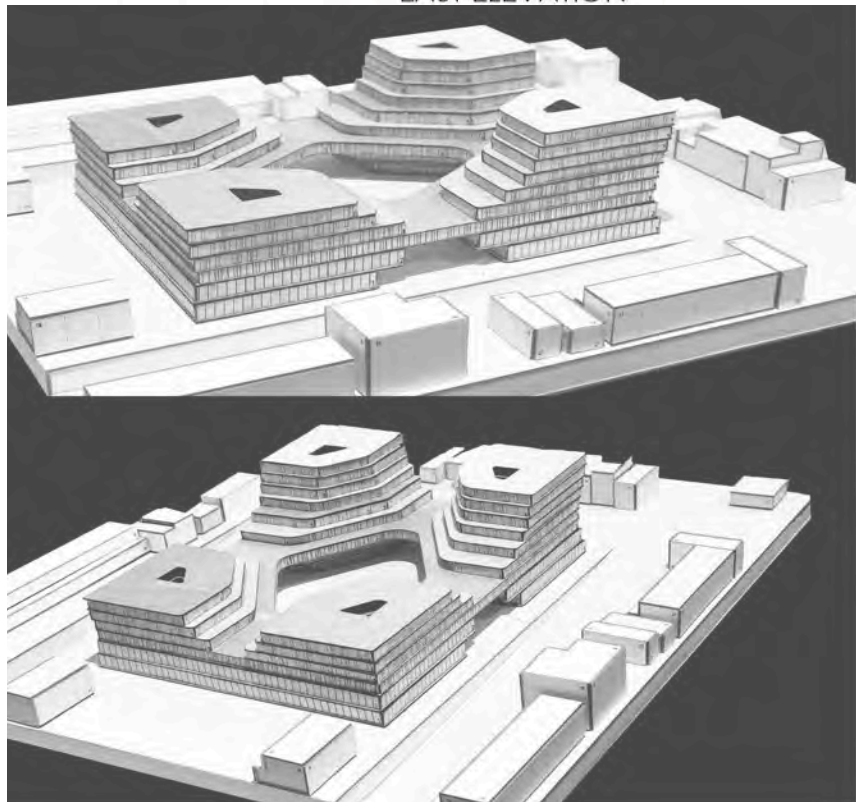
## ZONING INFORMATION



## GEORGIA AVENUE | SITE ANALYSIS



The project focused on **[Re] Connecting the Creative Community Corridor** by integrating the concept of 'creative place making', 'walkable neighborhood' and 'healthy community'. Residents and users of this site have requested a livable, **walkable corridor** which is iconic, serves as a gateway and at the same time could support artistic streetscape for the community. This project will be a model for campus design and neighborhood change at the heart of Nation's capital, showing how a city can embed creative place making by incorporating Urban Design at the outset of infrastructure development.

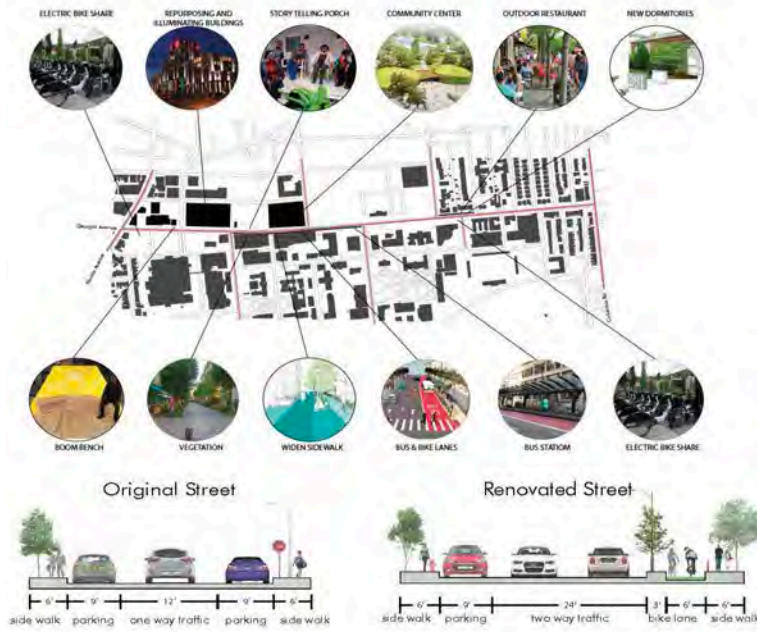




# GEORGIA AVENUE CORRIDOR

# GEORGIA AVENUE'S COMMUNITY HUB

FOR FOOD, ART, AND ENTERTAINMENT  
GEORGIA AVENUE AND COLUMBIA RD



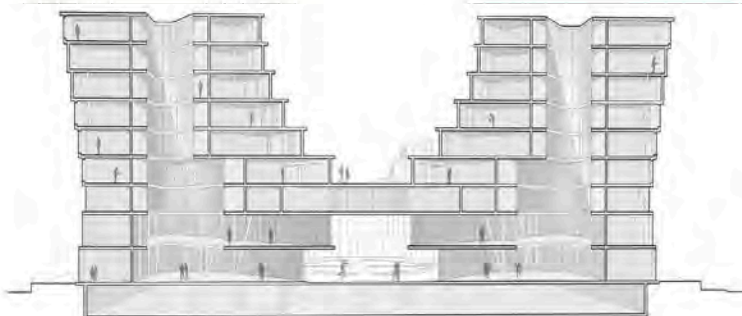
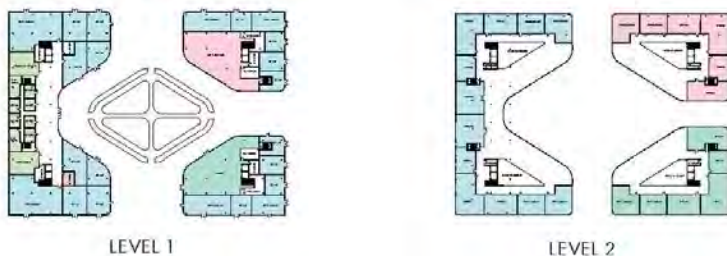
## Design Process

**Phase 1:** Theoretical understanding, precedent analysis of relevant case studies, DCOP creative place making initiative and pre-urban design of the site

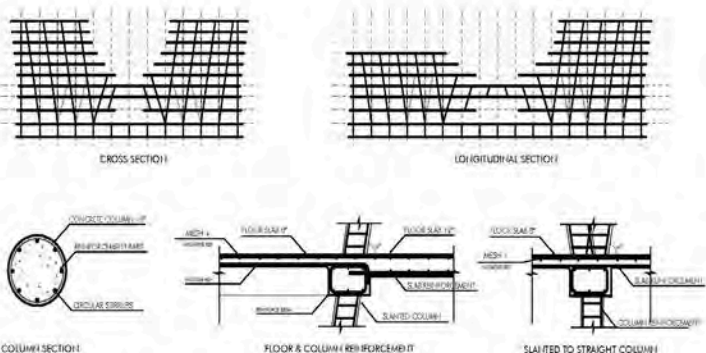
**Phase 2:** Research and Master Plan Development: Existing site analysis and proposal

**Phase 3:** Detail Design/ Presentation: Design of a mixed-use facility

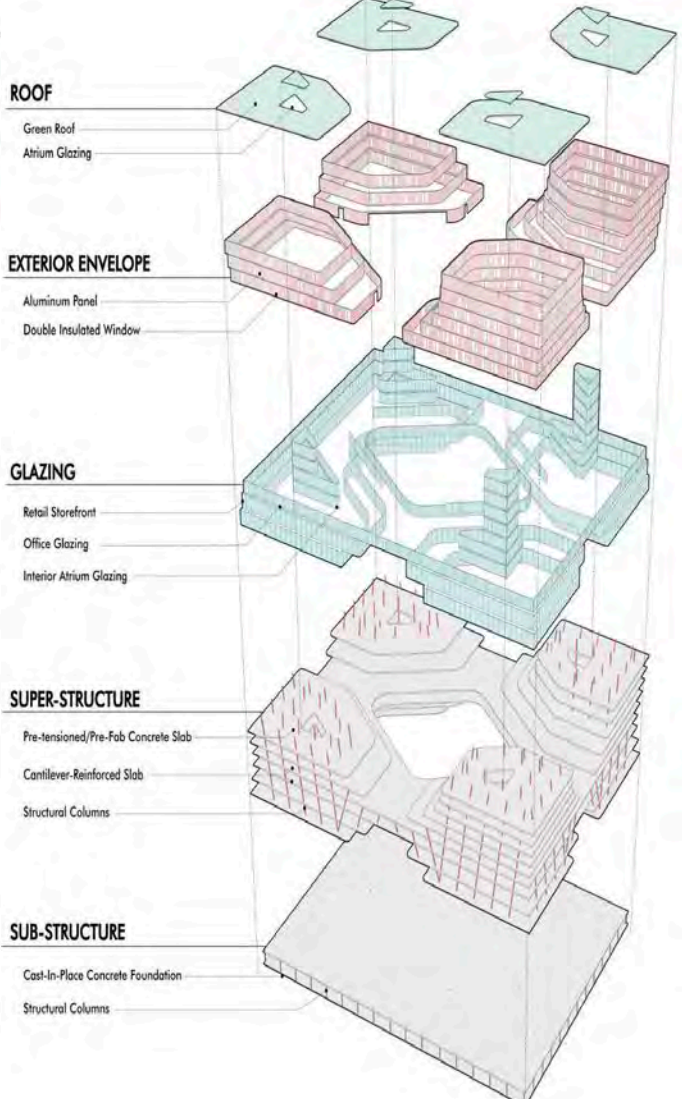
## FLOOR PLANS



## PERSPECTIVE SECTION



## STRUCTURAL DIAGRAM





# 03 Arch 891: Thesis Preparation COURSE DESCRIPTION

Thesis Preparation focuses on the research protocols, analytical techniques, theoretical and philosophical constructs and practical constraints associated with initiating and advancing the Architectural Thesis inquiry. This course provides student with the opportunity to prepare for a thesis inquiry that is evaluated based on the studio output, student's satisfactory completion of the research, design analysis and student's readiness to enter the profession. In that connection, student should be aware that the processes and procedures used in the course also closely parallel to encounter in professional design practices, particularly those that are "idea driven". This course reflects a multi-faceted approach. In order to meet the course goals, the class provides a structural framework throughout the semester using a combination of lectures, individual and group work, pin ups, desk critics, reviews, writing, reading and guest lectures.



Reducing solar heat gain during the sunny season, slowdown runoff during rainy season, improving the air quality, enhance living quality  
**Green Roof - House for Trees / Vietnam**



Reduce solar radiation, allow views and light while maintaining a certain degree of opaqueness and privacy  
**Brise Soleil - The Latern / Vietnam**



Extremely sustainable: cut and used between 3 and 5 years, stronger than concrete and steel yet highly flexible and lightweight, locally abundant  
**Bamboo - Bamboo Restaurants / Vietnam**



More efficient system of water management, reducing the amount of water runoff and wasted water  
**On-site Water Treatment - 1315 Peachtree / US**



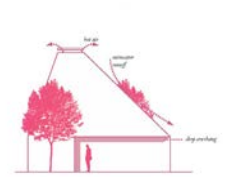
SITE LOCATION



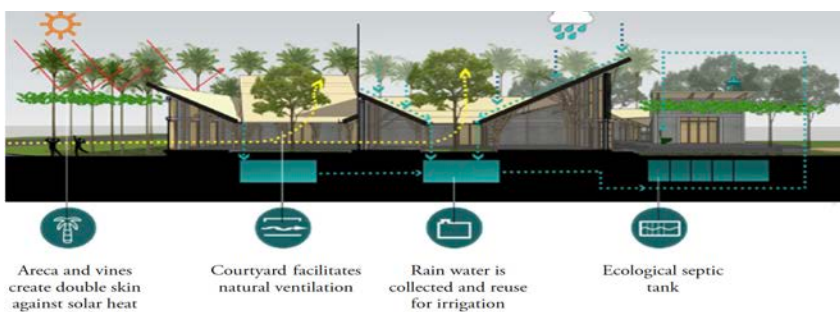
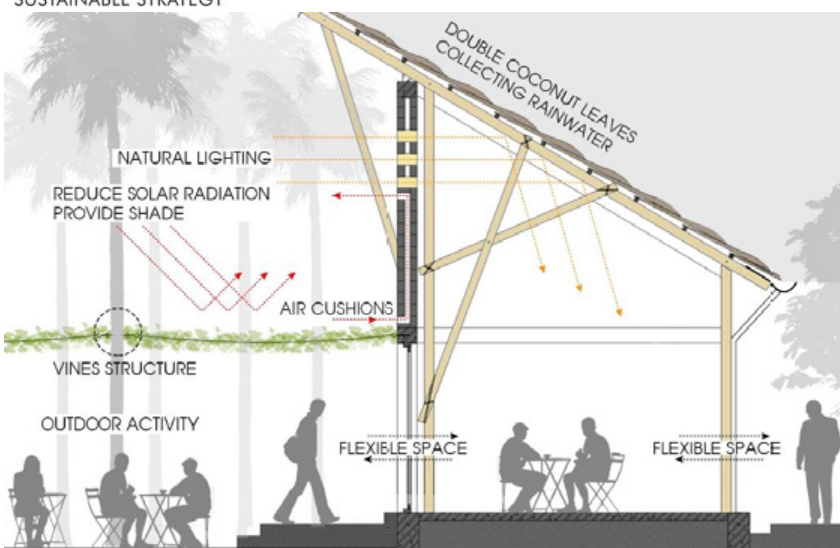
Modular Elevation



Plan



Modular Elevation





# RE-IMAGINING THE SAFE SPACE



## STATEMENT OF PURPOSE:

TO FOSTER A SAFE ENVIRONMENT FOR CRITICAL, INTELLECTUAL AND COMMUNAL DIALOGUE IN SUCH A POLARIZED MOMENT IN HISTORY.

## THESIS QUESTION:

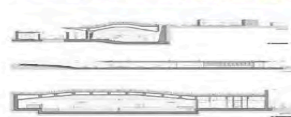
HOW CAN THE IMPLEMENTATION OF A SAFE SPACE WITHIN A HIGH SCHOOL CAMPUS FOSTER AN ENVIRONMENT FOR SAFE COMMUNAL DIALOGUE AND SHARED EXPERIENCES? (WIP)

## PRECEDENT ANALYSIS:

### SANCAKLAR MOSQUE

ISTANBUL, TURKEY

BY EMRE AROLAT ARCHITECTS (2013)



THIS PROJECT HELPS TO SUGGEST WAYS TO DEAL WITH EXISTING SITE CONDITIONS AND EMPHASIZING THIS CONCEPT TO CREATE A SACRED AND ISOLATED FORM. EXPRESSION IT IS IMPORTANT FOR THIS PROJECT TO REMOVE ANY SENSE OF SPACE AND REACH THE TRUE ESSENCE OF WHAT IT MEANS TO BE IN A "SAFE SPACE". THIS PRECEDENT FURTHER EMPHASIZES THIS NEED FOR DESIGN TO BE PURE IN ITS INTENTIONS AND PULL BACK FROM THE OUTSIDE WORLD THROUGH ITS ONE-USE SPACES.

AS THE FIRST MOSQUE FOR THE ARCHITECTURE FIRM AROLAT SAYS, "WE WANTED TO GET RID OF THE FORM". THEY SOLELY RELED ON BUILDING MATERIALS LIKE STONE AND CONCRETE AND THE OVERALL INTEGRATION OF BUILDING TO SITE.



## CASE STUDY 1

## SCOPE:

A PROGRAMMATIC ADDITION TO AN EXISTING HIGH SCHOOL IN SUWANEE, GA. FOCUSING ON THE DIALOGUE AMONGST STUDENT'S AND HOW THAT CONTRIBUTES TO A COLLECTIVE IDENTITY AND SHARED EXPERIENCES.

THE STUDY OF THE IMPLEMENTATION OF RITUAL SPACES AND ACTIVITY IN ARCHITECTURE AND ITS IMPACT ON THE PERCEPTIONS OF HIGH SCHOOL STUDENTS.

## RESEARCH / TOPICS STUDIED:

- ORIGIN OF A SAFE SPACE - SEVERAL RESOURCES
- IMPACT OF POLITICAL AND SOCIAL CLIMATE ON STUDENTS - SEVERAL RESOURCES
- RITUAL CONNECTEDNESS - PROF. WILLIAM TAYLOR
- THE SACRED AND THE PROFANE - MIRCEA ELIADE

## KEY WORDS / PHRASES:

SAFE SPACE  
RITUAL  
RITUAL CONNECTEDNESS  
LIMINAL SPACE  
COLLECTIVE DISCOURSE  
COLLECTIVE IDENTITY  
SHARED IDENTITY  
COMMUNAL CONNECTION  
EMPATHY  
TOLERANCE  
SPATIAL HIERARCHY  
COLLECTIVE VULNERABILITY  
THRESHOLD  
TRANSCENDENCE

THE COLLECTIVE  
THE INDIVIDUAL

## CASE STUDY 2

### WOMEN'S OPPORTUNITY CENTER

KAYONZA, RWANDA

BY SHARON DAVIS DESIGN (2013)



THIS PROJECT EMPHASIZES PROGRAMMATIC ELEMENTS THROUGH BOTH SPATIAL AND SOCIAL LAYERS, WHICH I FIND TO BE VERY INTERESTING AND VERY RARE. MY PROJECT ALSO AIMS TO INTEGRATE THE PROPER SPATIAL AND SOCIAL LAYERS SO THAT THEY BECOME AMBIGUOUS TO EACH OTHER. THE SPATIAL PROGRAMMING OF THE WOMEN'S CENTER ALLOWS FOR WOMEN TO BE COMPLETELY FREE AND OPEN TO DIFFERENT ECONOMIC OPPORTUNITIES WHILE ALSO PROVIDING A SAFE HAVEN FOR THEM TO EXPLORE THEIR CREATIVITY AND WORK.

ALTHOUGH I WOULD LIKE TO ACHIEVE THE SAME IDEA OF SPATIAL AND SOCIAL LAYERS, THE SPECIFICS OF THE PROGRAMMATIC ELEMENTS HAVE NO RELATION TO MY PROJECT SPECIFICALLY.



## LOCATION OF STUDY:

## OVERVIEW

## ZONING MAPS & DATA



## THE MATERIALITY OF THE RITUAL SPACE IN ARCHITECTURE:

HOW COULD THE THEORY OF RITUAL LEAD TO THE PROGRAM OF A BUILDING, AND FURTHER THE PERCEPTUAL ADVANCEMENT OF THE USER?

HOW DOES THE IDEA OF RITUAL CONTRIBUTE TO THE EXPRESSION OF ARCHITECTURE?

WHAT DOES THE ROLE OF CONTEMPLATION, THE GATEWAY BETWEEN DIFFERENT PERCEPTIONS, HAVE IN ARCHITECTURE?

THE AXIS MUNDI:

THE CENTER OF THE WORLD AND ALL CULTURES WILL BE USED TO EXPLORE THE PLACEMENT OF THE SACRED IN THE BUILT ENVIRONMENT.

"WHEN PEOPLE ENGAGE IN RITUAL ACTIVITY, THEY SEPARATE THEMSELVES, PARTIALLY IF NOT TOTALLY, FROM THE RULES AND STATUTES THEY HAVE IN THE WORK-DAY WORLD. THERE IS A THRESHOLD IN TIME AND SPACE, OR BOTH, AND CERTAINLY A DEMARCATION OF BEHAVIOR OVER WHICH PEOPLE PASS WHEN ENTERING INTO RITUAL. THE DAY-TO-DAY WORLD, WITH ITS SOCIAL STRUCTURE, IS TEMPORARILY SUSPENDED."

-DR. TOM F. DRIVER  
(PROFESSOR OF THEOLOGY AND CULTURE, EMERITUS AT UNION THEOLOGICAL SEMINARY IN NEW YORK)



## CASE STUDY 3

### WINDHOVER CONTEMPLATIVE CENTER

STANFORD UNIVERSITY, STANFORD, CALIFORNIA

ADLIN DARLING DESIGN (2014)

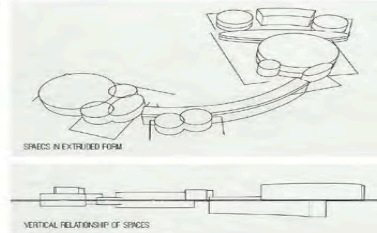


THIS PROJECT IS VERY UNIQUE IN ITS USE OF AN OPEN-ENDED PROGRAM THAT ENCOMPASSES RELIGION, ART, AND NATURE. WITH IT BEING ONLY FOR STUDENTS, STAFF, AND FACULTY, ONLY OPEN TO THE PUBLIC ONCE A WEEK, IT BECOMES A SANCTUARY AND A STRONG MULTIDIRECTIONAL SPACE. FOR THOSE ON CAMPUS WHO WISH TO FIND SILENCE FROM THE STRESSES OF THE WORLD AROUND THEM BEFORE VISITORS STEP INTO THE FRONT DOOR, THEY MUST WALK ALONG A PATHWAY THAT IS ALMOST THE FULL LENGTH OF THE BUILDING, CREATING AN ENTRY SEQUENCE THAT IS SURE TO TRANSCEND THE VISITOR TO A MORE HEIGHTENED PERSPECTIVE.

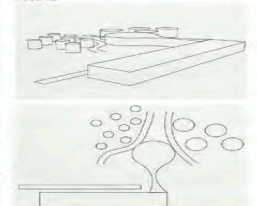
I WOULD LIKE TO ACHIEVE THE SAME NOTION OF TRANSCENDENCE THAT THIS PROJECT DOES, HOWEVER THROUGH DIFFERENT ELEMENTS OF PROGRAM.



## PART II DEVELOPMENT:



THE SECOND SPATIAL RELATIONSHIP IS APPLIED TO THE SITE. THE PROGRAM NOTION OF FOLLOWING THE PERCEPTION AND THE COURSE OF THE WATER FROM THE EXISTING CREEK, THE DESIGNER HAS CREATED AN EASY FLOW OF THE PROGRAM SPACES TO THE OTHER SPACES.





# 04 Arch 430: Health and Design

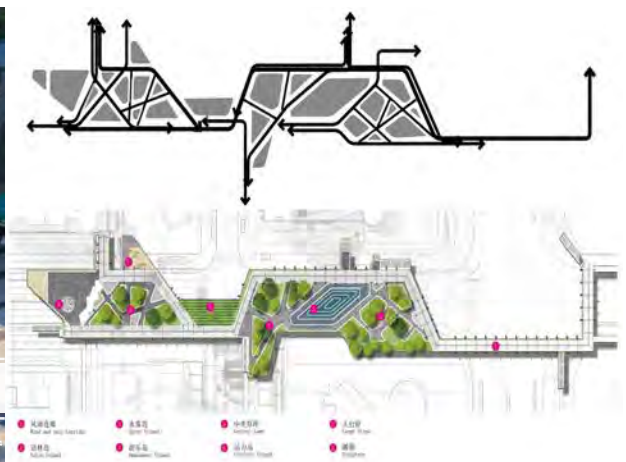
## COURSE DESCRIPTION

When people think of health, often the first thing that comes to mind is the medical industry and treating illness when individuals are unwell. However, architects and designers can help create healthy buildings and communities to shape a healthy future. This course investigates the connections between health, design and the built environment and provides students with a framework to assess different urban and built environments from health and wellbeing viewpoints. This course explores

1. The roles architects, planners, and designers might pursue in support of promoting healthy places – neighborhoods, cities, and regions.
2. The relationship between health and urban development with a focus on healthy design and community participation through case studies across the world.
3. Neighborhood impacts on individuals' health and well-being.
4. Questions that will guide our inquiry and engagement on design practice and our collaboration with public health, design and other professionals.



FLOATING ARCHIPELAGO PEDESTRIAN BRIDGE



### PROJECT DETAILS

Location: Shenzhen, China  
Architects: FCHA  
Size: 10,000 sq.m  
Year: 2020

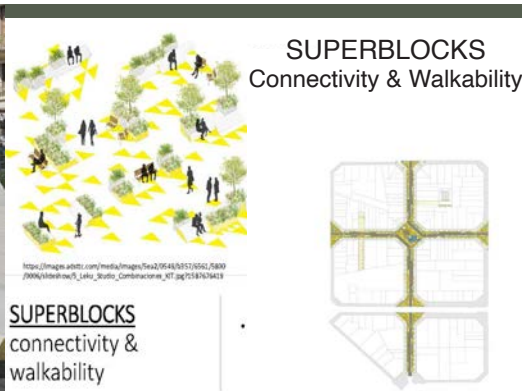
The 2-story bridge serves as a connector (platforms) between the central government district of Longgang, the commercial complex, the residential area and the commercial street etc.



**Project Description:** Vitality island is close to the residential and school area. The plaza space consists of trees and seating which serves as a waiting area for parents and an after-school play area for the children. Spray Island acts as a multifunctional area because it is the most concentrated space. This 'island' is sunken slightly, so it becomes a shallow pool when it rains. There is also a spraying device that adjusts in response to the microclimate.

This design is an effective way to increase active living. The design intervention allows people to engage in physical activity as the form is an integral part of the infrastructure necessary for people to cross the busy streets. People will have no choice but to traverse across the bridge to get to their destinations safely.

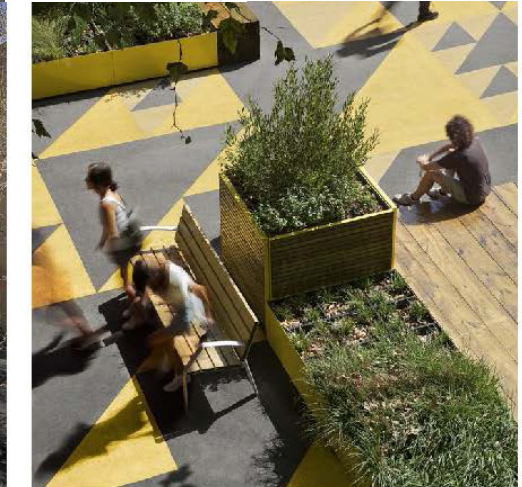




The superblock strategy combines blocks that were previously separated by streets into larger blocks with pedestrian roads and public spaces. This new organization encourages locals to walk more and re-connect with each other in the nearby public spaces.



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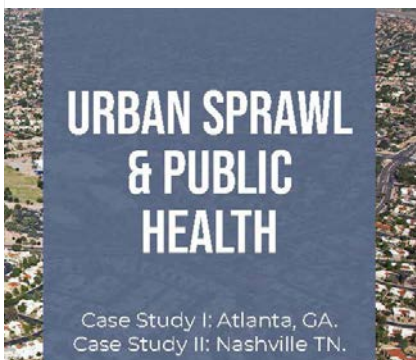
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## SUPERBLOCKS sustainability

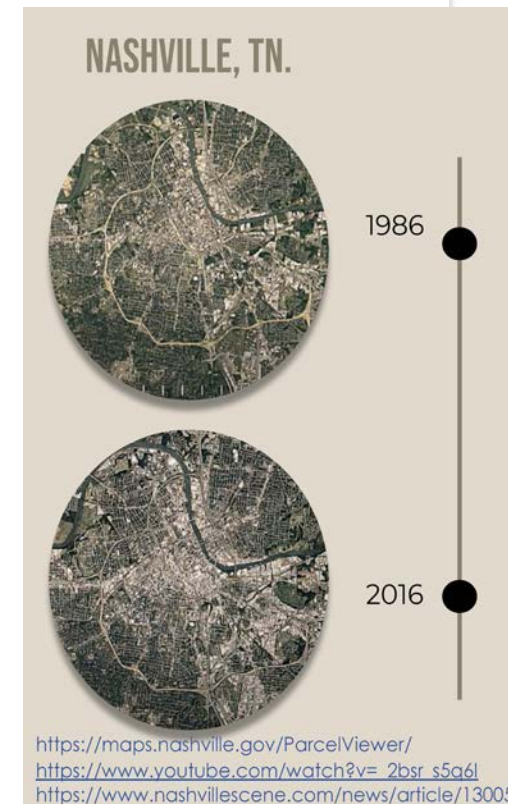
- The pedestrian centric spaces consists of many plants which help filter polluted air, reduces traffic noise and eradicates the use of the automobile hence making people use a more sustainable mode of transport.



The project's aim is to improve the health and lifestyle of the people within the dense, grid like area. The plan acts as a solution to the lack of green spaces, pollution and climate issues.



<https://atlanta.curbed.com/2020/3/31/21200613/atlanta-urban-sprawl>  
<https://patch.com/georgia/midtown/here-s-how-head>



<https://maps.nashville.gov/ParcelViewer/>  
[https://www.youtube.com/watch?v=2bsr\\_s5a6I](https://www.youtube.com/watch?v=2bsr_s5a6I)  
<https://www.nashvillescene.com/news/article/1300>

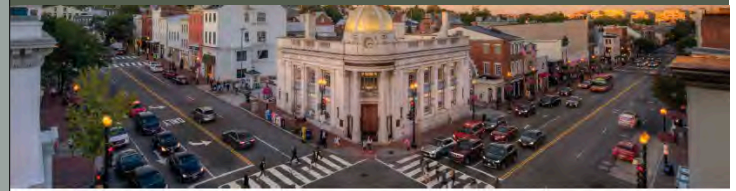


# 05 Arch 651: Principles of Urban Design

## COURSE DESCRIPTION

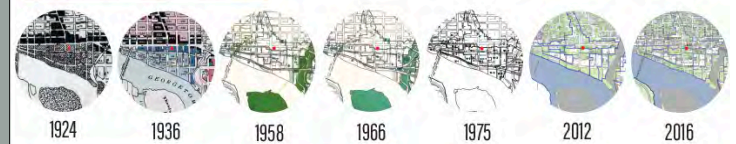
The course equips students with an understanding of the foundational ideas and strategies that we confront and debate in the practice of urban design and in the interface between buildings and cities. This course exposes architecture students to the concepts, methodologies, techniques and contemporary issues in urban design. It conveys an understanding of urban design in the contexts of both the micro and macro scales of the built environment and to sensitize students to the place of architectural interventions in systems of urban design. The course consists of lectures, case studies, seminars, and a short project.

This course examines the principles of urban design and how this concept helps to reshape our communities, cities and neighborhoods. By using the relevant theories and concepts, students will be able to critically examine and understand a variety of contemporary city design, ideas, concepts, methodologies, techniques, attitudes and master planning projects across the globe. The course combines lectures, readings and student research projects. In search of more sustainable solutions to urban growth, social issues and its impact on the environment, this course also examines global case studies of urban sustainability. This course focuses on critical analysis of resilient city and sustainable master plan design in global urban context.



### History

After the Civil War, a large number of freed slaves had migrated to Georgetown. The African American community had truly flourished and ended up becoming increasingly self-reliant. In the 1880s the waterfront was truly prospering but in the 1890s the C & O Canal was damaged by a Potomac River flood, and the Canal Company was bankrupted. This led to an intense economic decline and after World War I, Georgetown became known as one of Washington's worst slums. Things began to reverse in 1930s with the New Deal and truly turned around when Senator John F. Kennedy lived in the neighborhood in the 1950s.



### City Architect:

Pierre Charles L'Enfant



A **Basic Grid Arrangement** of streets run north-south and east-west, with a second wheel-and-spoke pattern of avenues connecting the different features around the city. The gridded streets are not uniformly arranged, which creates a variety of block sizes and shapes; oriented either vertically or horizontally.

### Walkability Score



### Top 5 Restaurants

1. 1789 Restaurant
2. Martin's Tavern
3. Café Milano
4. Morton's The Steakhouse
5. Clyde's of Georgetown

### Top 5 Shops

1. Relish
2. Billy Reid
3. Bluemercury
4. Hu's Wear & Hu's Shoes
5. Rag & Bone

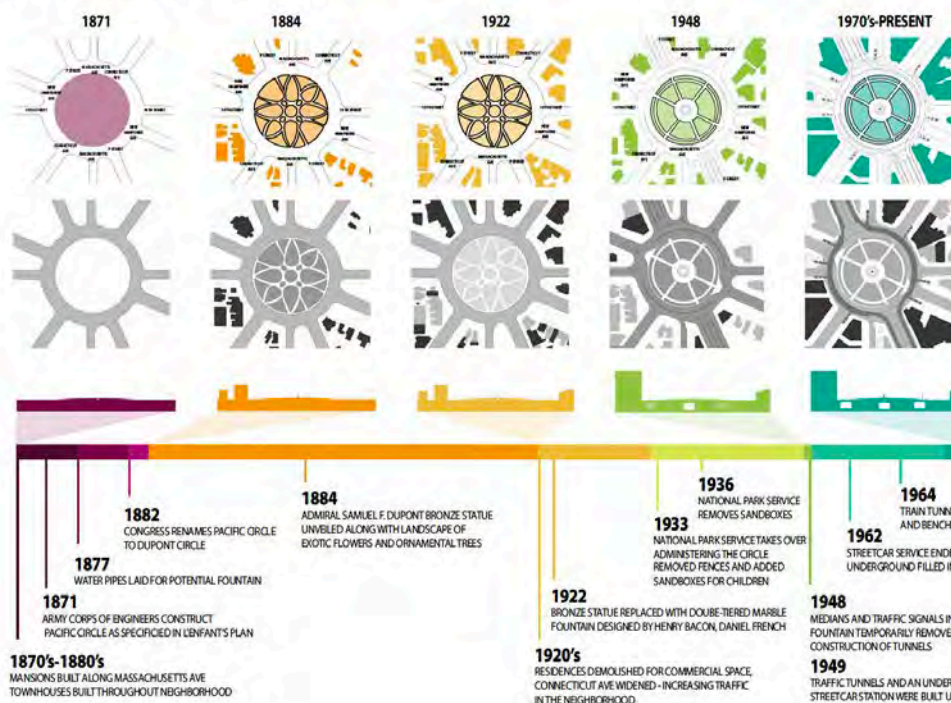


### C&O Canal

C&O Canal is The Chesapeake and Ohio Canal which operated from 1831 until 1924 along the Potomac River from Washington, D.C., to Cumberland, Maryland. The canal's primary cargo was coal from the Allegheny Mountains.



### URBAN MORPHOLOGY OF DUPONT CIRCLE



### WALKABILITY OF DUPONT CIRCLE

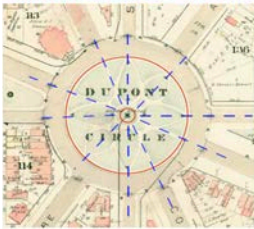




# Arch 651: Principles of Urban Design

## DUPONT CIRCLE ANALYSIS

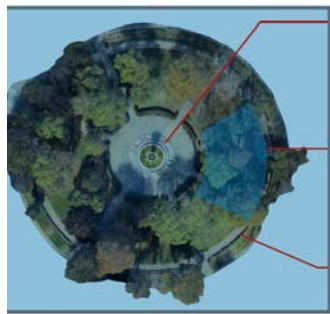
### ORGANIZATIONAL RELATIONSHIP & CHARACTERISTICS



HOPKIN'S MAP - 1887

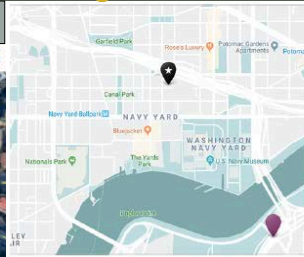


PRESENT DAY



**CORE**  
ELEVATED FOUNTAIN  
The elevated fountain also serves as a seating area.  
**BENCHES**  
The curved benches delineate the periphery of the core area and allows one to get a wide view of the whole area.  
**MIDDLE**  
GREEN SPACE  
The greenery acts a separator between the serenity of the inner core and the hustle and bustle outside the circle.

**OUTER RING**  
PATHS  
The paths and seating in the outer ring are mostly shaded by the trees and provides a somewhat private and comfortable space (away from the center).



Washington DC Navy Yard is the first and most important shipyard the United States Navy ever had access to during its history. It is, therefore, the oldest military installation of this field. The facility is located in the southeastern part of Washington, DC. These days, the shipyard serves as an administrative center and hosts the headquarters of a few classified units and institutions.



Aerial view of the Washington Navy Yard

## TIMELINE



**1995**  
BRAC decision consolidates NAVSEA to Navy Yard



**1999**  
3 new office buildings & Navy campus expansion begin construction



**2006**  
Stadium construction begins Capitol Hill Tower/Courtyard Marriott opens



**2007**  
Navy Yard Metro expansion at Half Street  
Douglass Bridge lowered  
Capitol Riverfront BID created

## HISTORY OF WASHINGTON DC NAVY YARD

Navy Yard was Washington's earliest industrial neighborhood. One of the earliest industrial buildings was the eight-story brick Sugar House, built in Square 744 at the foot of New Jersey Avenue, SE as a sugar refinery in 1797-98

The Yard was created in 1799 by an act of Congress, the Naval History and Heritage Command says. It was envisioned as a shipbuilding and fitting facility on the Anacostia River.

During the War of 1812, the Yard burned down and was rebuilt as a weapons manufacturing hub.

In the spring of 1976, Washington DC Navy Yard was given the National Historic Landmark status.

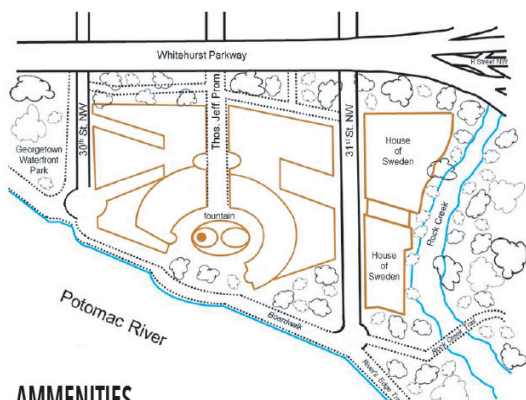
## ANALYSIS



Navy Yard is the 12th most walkable neighborhood in Washington D.C. with 4,091 residents.

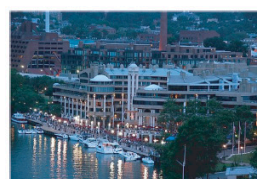
SW Ballpark - Navy Yard has excellent public transportation and is very bikeable.

## GEORGETOWN D.C. WATERFRONT



## AMMENITIES

The multipurpose property features luxury condominiums, office space, a public boardwalk and several restaurants. The waterfront restaurants are especially popular during the summer months. During the winter months, the fountain in the center of the plaza is converted to an ice rink.



## COURSE OBJECTIVES

- To develop critical thinking: introducing students to the process of urbanization through theories, models, concepts, techniques and vocabulary to describe and its implications to understand urban form and its evolution for the larger question of city design.
- To examine global case studies and design ideas: Identify real design projects and master plans of contemporary urbanism initiatives across the world from the metropolitan scale to the site scale to understand contemporary issues affecting urban development, urban quality and urban life.
- To produce and convey sustainable knowledge: To be able to articulate a personal approach to urban design from the point of view of designer, equip students with the knowledge and the ability to use case studies, assignments, writing and research skills to develop and offer solutions that advance design principles.

### HISTORY OF GEORGETOWN WATERFRONT

**FOUNDING OF GEORGETOWN WATERFRONT**  
1751  
51  
60 acres of Potomac Riverfront were granted to the British and named "Georgetown Waterfront".

**ESTABLISHMENT OF THE NATIONAL CAPITOL**  
1791  
91  
Georgetown is included in the new federal district and in the period after World War II, Georgetown gained a reputation as one of Washington's most desirable neighborhoods.

**TOBACCO CAPITAL**  
1865  
65  
The waterfront area was a bustling port during the Colonial period, with tobacco, cotton, and other goods being shipped in from the South, and nearly 50 of the great ships in Virginia were shipped through Georgetown. The town prospered after the Civil War.

**ECONOMIC DECLINE**  
1889  
89  
The waterfront area was a bustling port during the Colonial period, with tobacco, cotton, and other goods being shipped in from the South, and nearly 50 of the great ships in Virginia were shipped through Georgetown. The town prospered after the Civil War.

**HEAVY INDUSTRY**  
1909  
09  
The waterfront area was a bustling port during the Colonial period, with tobacco, cotton, and other goods being shipped in from the South, and nearly 50 of the great ships in Virginia were shipped through Georgetown. The town prospered after the Civil War.

**HIGHWAYS AND PARKING LOTS**  
1933  
33  
The waterfront area was a bustling port during the Colonial period, with tobacco, cotton, and other goods being shipped in from the South, and nearly 50 of the great ships in Virginia were shipped through Georgetown. The town prospered after the Civil War.

**ABANDONMENT OF THE WATERFRONT**  
1949  
49  
The waterfront area was a bustling port during the Colonial period, with tobacco, cotton, and other goods being shipped in from the South, and nearly 50 of the great ships in Virginia were shipped through Georgetown. The town prospered after the Civil War.

**REDEVELOPMENT**  
1974  
74  
The city government started the area and started to build new office buildings. The Georgetown Waterfront area is now a thriving neighborhood with a mix of residential and commercial buildings.

**NEW FUNDING**  
1985  
85  
City government transferred the waterfront area to the National Park Service. The National Park Service put together a design for the project, but they needed funds to begin construction and the project was put on hold for three decades.

**THE PARK**  
2005  
05  
A non-profit group, Friends of the Georgetown Waterfront, put together a design for the project. The city government started the area and started to build new office buildings. The Georgetown Waterfront area is now a thriving neighborhood with a mix of residential and commercial buildings.



*"As my studio Professor, Dr. Ferdous pushed me to think outside of the glass box and helped me to be as creative in the design process as possible while simultaneously holding my accountable for the comprehensive aspects, ensuring a well deliverable final product"*

Class of 2022  
Current Graduate Student  
Howard Architecture

