

Course Syllabus

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Advance Design Studio V

Fall 2017

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REINVENTING MIAMI - DRAFT

Resistance:

an act, instance or a means of resisting...to exert force in opposition...so as to counteract or defeat. The refusal to accept or comply.

As in: Reinventing Miami requires resistance to the status quo, to the path of least resistance and to a reliance on what we know already.

Resilience:

The capacity to recover quickly from, or adjust easily to, undesirable events or changes*

As in: Designing for resiliency is to anticipate adversity and to transform that possibility into opportunity.

Miami and Miami Beach offer a unique opportunity for this design based research studio to generate new urban visions for the resilient city.

Over the past several years there has been significant discourse across a broad spectrum of stakeholders addressing the significance of climate change and the associated risks relative to human inhabitation especially in dense population centers.

And while New Orleans and New York City, have become compelling case studies with respect to strategies of resilience following Hurricane Katrina and Hurricane Sandy, the scale and type of many of the strategies that have emerged in the aftermath, especially with respect to large scale infrastructural investments and engineering projects, are not suitable or possible for many other urban centers especially the 100 or more major urban centers along the south eastern US coastline.

Situated at the mouth of the Miami River and running north south along Biscayne Bay, Miami is spread across low flat land that spans from Biscayne Bay on the east to the swamps of the Everglades to the west. Across Biscayne Bay to the east is Miami Beach in the form of a collection of barrier islands that face Miami on one side and the Atlantic Ocean on the other.

Between the two there is a diverse catalog of land/water sites typologies to be explored:

- Miami river and canal
- Miami bayfront on Biscayne Bay
- Miami Beach bayfront on Biscayne Bay
- Biscayne Bay Causeways
- Biscayne Bay islands
- Atlantic Ocean barrier islands
- Atlantic Ocean beachfront
- low lying inland areas of Miami Beach

Miami/Miami Beach offer a particularly unique if not extreme geography and hydrology that is prime for a collective speculative investigation of new architectural prototypes based on a resilient approach to rising sea levels and storm surges. The interconnectedness, extent and diversity of these conditions preempts the possibility of a grand and singular approach to resilient design and strategies for urban interventions but rather offers the possibility to investigate a range of resilient land/water interventions informed by specific site conditions and a proposed future program.

While Miami/Miami Beach is well known as a tourism destination attracting a broad range of visitors who are drawn to its famous beaches and resorts, it is also in the midst of an urban evolution offering an increasingly diverse range of sophisticated cultural destinations and events.

Tourism has had broad effects on the local economy from feeding the growing hospitality and travel industries to creating an international market for real estate speculation that weathers repetitive cycles of boom and bust development. Miami is also an important banking center for international investors, especially from central and South America, and the 2nd largest financial hub in the US after New York. While real estate development, transportation infrastructure and tourism all stand to be adversely impacted by the detrimental effects of storm surges and rising sea levels, until recently these have been eclipsed by the forces of commerce and the flow of capital.

Today however, the realities and risks of rising sea levels associated with an anthropogenic climate have been acknowledged and a broad range of new policies and strategies are in the process of being developed, proposed, adopted and implemented. While much remains to be done (undone) the shift in the relationship between Miami/Miami Beach and its connection to the water is an opportunity to “reinvent” Miami through the studio’s architectural proposals that will negotiate and exploit a sampling of unique land/water sites as case studies. These speculations, based on new types of resilient and sustainable typologies coupled with new programs, are collectively proposed as a vehicle that would contribute to the cities’ evolution on multiple levels from culture, and education, to R & D and industry, to commerce, energy production and transportation. We are looking to design for the future not today.

What is the city of the future?

The studio will research trends of both the near and distant future. What will be the impact of autonomous vehicles, IoT, robotics and machine learning, an evolving sharing economy, mass migration, new forms of energy production, to just name a few. What is the future of transportation, manufacturing and the environment as well as the trajectory of human habitation in terms of dwelling, working, recreating, learning and exploring. How will the influence of these be manifested in architecture? Miami and Miami Beach, each with their unique but intertwined histories and identities, will as linked and interdependent urban entities with diverse but evolving demographics and economies, provide a very real backdrop for our very speculative explorations.

This “design based” research studio will be structured to investigate the overall social, economic, cultural and institutional context of Miami/Miami Beach to gain an understanding of the current dynamic at play between physical and non-physical forces and to speculate how its future might play out.

In tandem the studio will investigate the current geography, hydrology, and specific resiliency relevant policies, plans and strategies of Miami/Miami Beach as well as

southeast Florida in general, will undertake research and case studies of other relevant examples of urban adaptation to the threats rising sea levels

The studio will travel to Miami during the 4th week of studio, visiting sites and meeting with key individuals working in areas of culture, resilience, city planning and development.

Schedule summary

Weeks 1 - 3 Research/Analysis/Concept

Week 4 Presentation / Travel to miami

Weeks 5 - 8 Concept development

Week 8 Midterm review Friday October 27th

Weeks 9 - 13 Design Development

(Thanksgiving Nov 22 -24)

Final review Tuesday December 12th

Reference/Reading list to follow