

GulfSouth Studio

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Fall 2022
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This research was supported by the Gulf Research Program of the National Academies of Sciences, Engineering, and Medicine under award number 2000013562.

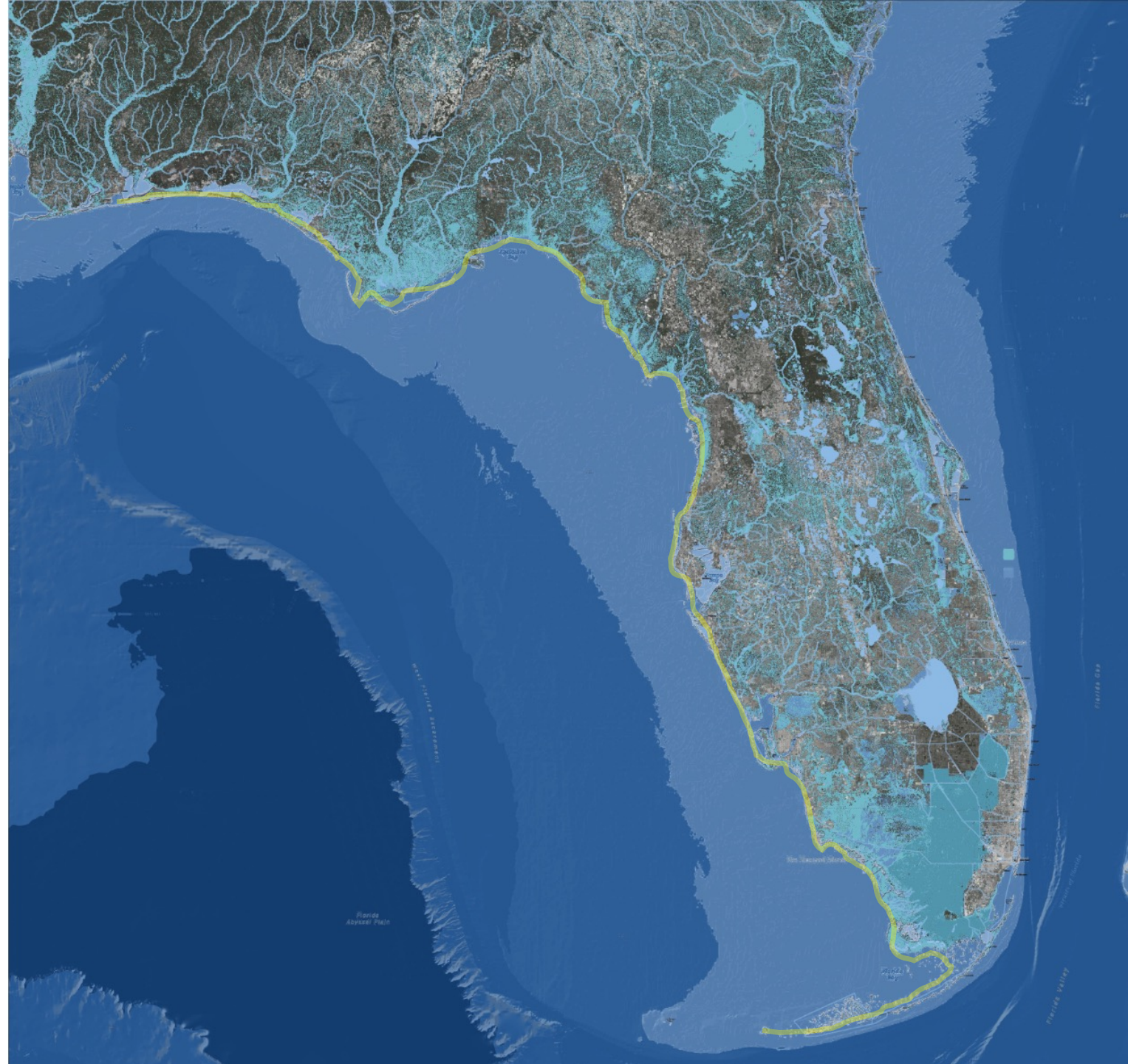
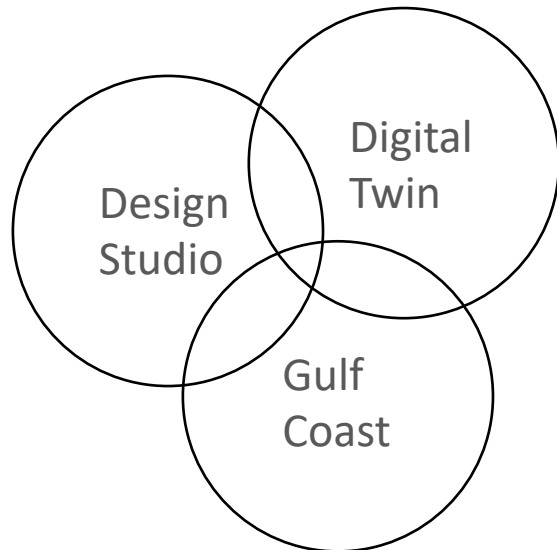
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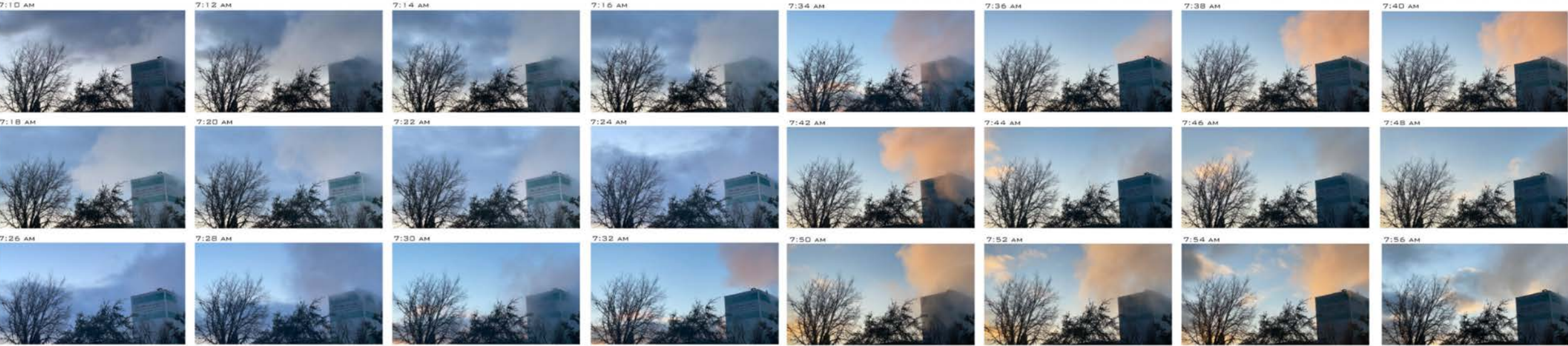
*Starting where the Caribbean tides lap at Key West's mangrove shore and stretching to the white sand beaches of the Florida Panhandle, the Florida Gulf Coast is 707 miles of richly diverse, abundantly productive, and persistently threatened landscape. Continuing further West, the U.S. shores along the Gulf of Mexico stretch 1,631 miles across 5 states, accounting for 35% of U.S. fisheries production and 50% of US oil and gas refining capacity. Historian Jack Davis aptly called the Gulf of Mexico "the American Sea," and **it embodies many American contradictions: it is an ecological treasure threatened by urbanization and industry, a landscape of transient occupation that has been continuously inhabited for millennia, a tranquil environment with the propensity for unimaginable fury.***

GulfSouth is a platform for undergraduate and graduate design-based education that explores the critical challenges facing the Gulf of Mexico's coastline and communities in the context of a changing climate. Challenges brought together within the platform's umbrella will include energy transition, changing Gulf Coastline, and community health and resilience.



Studio Premise

The course will interrogate the **'boundary conditions' that define built and natural systems along the Gulf**. A boundary is "something that indicates or fixes a limit or extent". State lines, coastlines, windows, walls, codes and cultures provide essential definition in a complex world. However, boundaries also 'fix' things in time, space, law, and memory. In an era of deep uncertainty, **this studio will contemplate the architect's complicity in the social creation of risk and the potential for built environments to contribute constructively to a new coastal paradigm defined by change.**



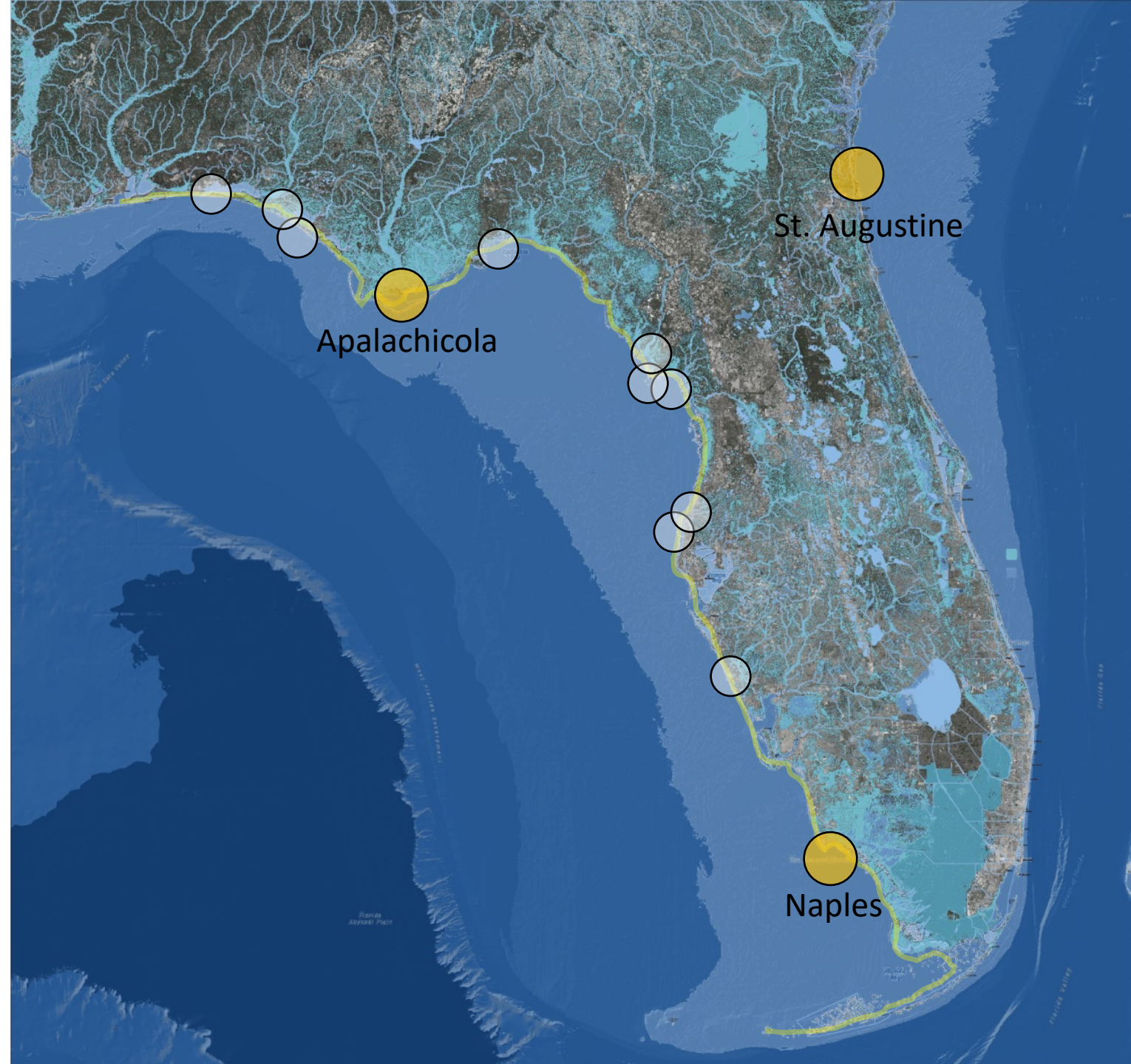
PROJECT

National Estuarine Research Reserve System (NERRS) Facility

The NERRS is a network of 30 coastal sites designated to protect and study estuarine systems located throughout US coastal areas. **This studio project will develop a speculative NERRS proposal focused on the rapidly transforming Florida Gulf Coast.** Students will each propose a new NERRS research facility (including laboratory, education, dormitory, and other spaces) as the centerpiece of new Reserves proposed across a collection of Gulf Coast sites. These sites will be selected through initial site visit and analysis. Through the design of the NERRS facility, **each student will take a position on the role that built environment can play along the Florida Gulf landscape, using architecture as lesson, measure, and response to rapid change.**



UNC Coastal Studies Institute / Clark Nexsen

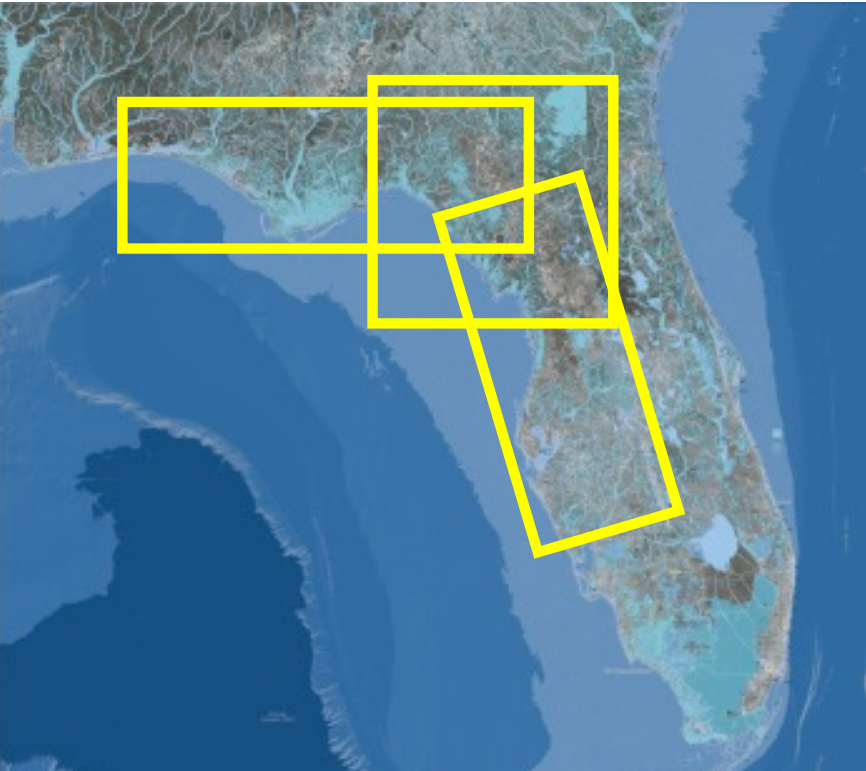


Module 1 - See

X, Y, Z - The Florida Gulf Coast in 3 scales

The Gulf Coast is a complex and diverse place: its ecology, society, urban and rural form, all contributing to the whole. This semester will soon focus on a very small piece of this environment. **However, the dynamics of the coast result from larger forces, so to understand the part is to also understand its particular relationship to the whole.**

X – The map and itinerary - Tool: ArcGIS Online



Y – The transect to the coast - Tool: Google Earth 3D, maps, geolocation, video

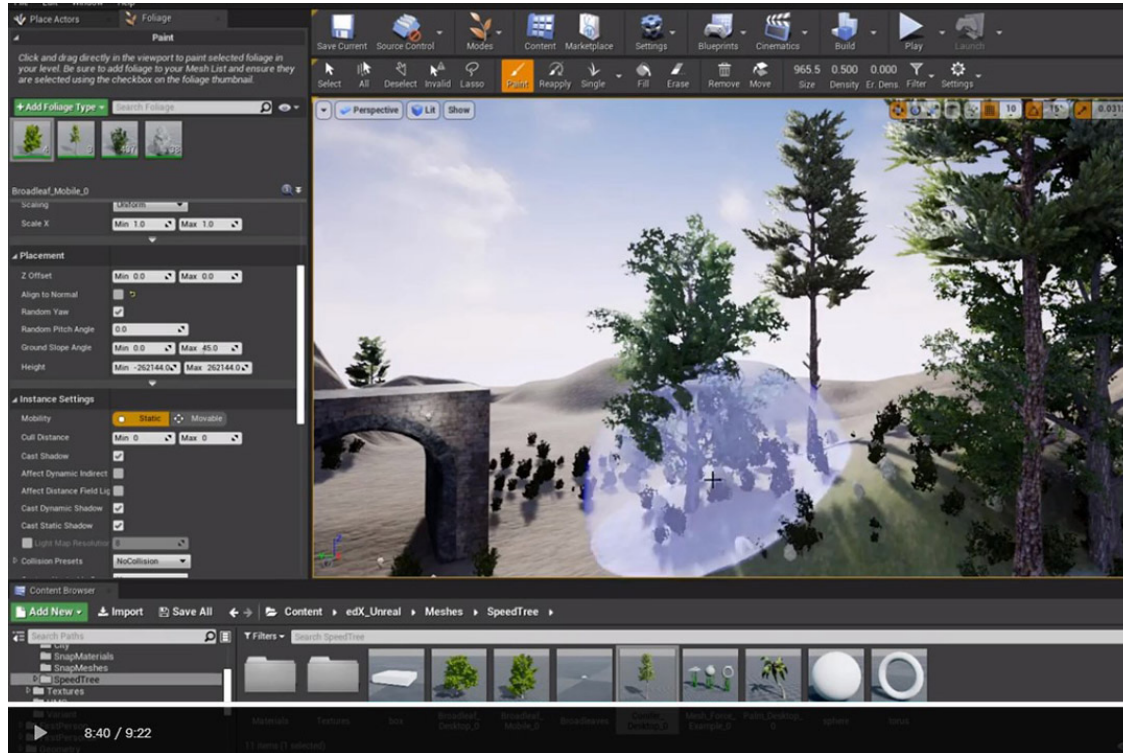


Z – Occupation at the human scale - Tool: Point Cloud Models



Module 2 – Model

A recent donation of high-end computer equipment, investment by UF in the “Unreal Engine”, and professional training for students will be a major component of the studio. **The new technology will be used to demonstrate ideas through the development of “digital twins” where design interventions unfold in real-time, intertwined with environmental, social, and infrastructural systems.**



Module 3 - Build

The National Estuarine Research Reserve

Working individually, students will develop their individual proposal for a NERRS research facility along the Gulf Coast of Florida.

