LARC 2550 COMMUNITY DESIGN | SPRING 2024

| Project Brief – Baruch Institute Student Community [Georgetown, SC]

This will be our studio project for the rest of the semester.

CONTEXT - The Baruch Institute of Coastal Ecology and Forest Science (BICEFS) is in Georgetown, South Carolina on **Hobcaw Barony**, a 16,000-acre tract of undeveloped land owned by the Belle W. Baruch Foundation, a non-profit organization. The coastal environment of Hobcaw offers a ***diversity of ecosystems including estuaries, tidal marshes, and freshwater swamps, coastal forests, and streams and rivers***. Topics of research at BICEFS address critical environmental issues including climate and land-use change, coastal science, water quality and quantity, biodiversity loss, and forest and watershed ecology and management.

Using the rich ecology of the Institute as inspiration, you will be tasked to design an ecologically sensitive master plan that can guide the Institute in preserving the existing natural communities and facilitate the rich, human community of students and faculty that inhabit the space during research seasons.

| PART01 – Research, Inventory, Analysis + Concept Generation

Document the cultural and ecological history of the land and provide analysis.

DUE: March 6th

Do more than collect the information. Represent the information in a compelling manner.

RESEARCH:

Researching site context provides a basis for your design decisions, allowing your designed systems and spaces to respond to the environmental and social needs.

Natural Features

- Topography
- Vegetation
- Hydrology and Geology (lakes, streams, watersheds, direction of flow)
- Ecological habitats

Political Features

- Land Use (past and present)
- City, county, and neighborhood boundaries
- Major influences on land (i.e. nearby industries or trades)

Social Features

- Demographics (past and present)
- Cultural identities (past and present)

Historical Features

- Aerial photography
- Stories and histories
- Artifacts

Case Study

- Provide 1 case study on existing research laboratory communities.
    - Not necessarily the built form, but how they are used and the types of amenities these places provide temporary residents.

INVENTORY:

A site inventory allows the designer to document the existing conditions of the space.

Site Visit + Inventory

- Photograph, photograph, photograph.
- Document existing conditions graphical (pen and paper, tablet and stylist, etc.)
    - Natural features (i.e. vegetation, ecosystems, hydrology, geologic conditions, topography, etc.)
    - Human made features (i.e. hardscapes, structures, utilities etc.)
    - Viewsheds
    - Circulation and access
    - Character
    - Auditory conditions

ANALYSIS:

Apply the research you've gathered to the existing conditions of the site. Evaluate the strengths and weakness of the site, and identity the threats and opportunities the site faces.

CONCEPTS:

Using the analysis you have conducted, identify the mission, vision, and goals of the project. Determine your big ideas that will assist you in generating the master plan.

DELIVERABLES

All work should be presented in a printed format for review and uploaded to Canvas

1. **Research (1 board):** map and diagram the information gathered
2. **Inventory (1 board)**: map and diagram the information gathered
3. **Analysis + Concepts (1 board)**
4. **Existing Site Model (1/class)**

| PART02 – Planning + Design

Using your work from Part01, plan and design the site. Be sure to consider the ecological and human communities that use the site.

DUE: April 5th

This phase can be called *Master Planning*. As groups, you will use your mission, vision, goals and big ideas to develop compatible programs and the physical organization of the landscape. Place importance on circulation, wayfinding, amenities, and inviting space.

The plan should include, but is not limited to:

- Housing
- Outdoor event or gathering space (full season)
- Parking
- Service structures and infrastructure
- Accessible circulation
- Landscape and hardscape elements

When making design decisions, consider:

Ecological Design

- Preservation and enhancement of natural features
- How the landscape is used by wildlife
- Ecological changes or shifts the site could experience

Equitable Design

- Accessibility
- Multi-mobility
- Respectful
- Appropriate

Resilient Design

- Built to withstand (hint: consider the land altering factors of the coast)
- Reflects the vernacular of the area or culture (hint: define the vernacular)

Does your design meet the needs of the community you've defined? Is it accessible to the research community? The ecological communities? The student community? The neighboring community?

DELIVERABLES

All work should be presented in a printed format for review and uploaded to Canvas

1. **Plan or isometric (1):** appropriately scaled and labeled
2. **Section (1/group member):** shown at appropriate scales showing changes in topography, structure, space or material
3. **Diagram/Research Boards (3):** reflect and adapt the research from Part01 to Part02
4. **Mission, Vision, Goal, and Concept statement (1)**
5. **Exploded axonometric (1):** showing systems distributed throughout the site
6. **Location diagram (1):** show the site in context with the surrounding region
7. **Proposed Site Model (1/group)**
8. **Supporting diagrams:** additional drawings you feel assist in telling your story

| PART03 – Site + Detail

Using your work from Part02, split the site amongst your group and design a portion to well-defined and functional details.

DUE: Final Reviews (April 24th)

When making your detailed design decisions, consider:

Ecological Design

- Preservation and enhancement of natural features
- Green infrastructure as means of controlling stormwater
- Wildlife corridors with appropriate planting communities
- Sustainably sourced materials
- What ecosystem services are you developing?

Equitable Design

- Accessibility
- Multi-mobility
- Respectful
- Appropriate

Resilient Design

- Built to withstand (hint: consider the land altering factors of the coast)
- Reflects the vernacular of the area or culture (hint: define the vernacular)
- Adapts to the changing landscape and needs of future users

Experiential Design

- Character
- How materiality helps promote your mission
- Consider scale when developing designs

Detailed site designs should flesh out the details of the planting, hardscape, topography changes, landscape infrastructure, and materials and be reflective of the *Master Plan*.

DELIVERABLES

All work should be presented in a printed format for review and uploaded to Canvas

1. **Hardscape Plan (1):** appropriately scaled and labeled
2. **Grading plan (1) :** appropriately scaled and labeled
3. **Planting plan (1)- To be completed in planting design**
4. **Sections (3+):** shown at different scales showing changes in topography, structure, space or material
5. **Perspectives (3+):** show key features of the design
6. **Location diagram (1):** show the site in context with the master plan (may be one/group)
7. **Supporting diagrams (2+):** additional drawings you feel assist in telling the story
    a. **Planting communities- To be completed in planting design**
    b. **Character imagery and materials schedule**
    c. **Performance diagrams- environmental, social, cultural, etc.**