

ASSIGNMENT BRIEF #7 Well-Being

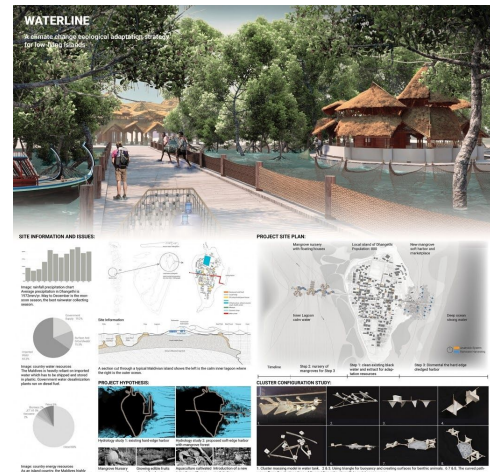
Measure 7: DESIGN FOR WELL-BEING

Sustainable design creates comfort, health, and wellness for people who inhabit or visit buildings.

Narrative: Discuss design strategies for optimizing daylight, indoor air quality, connections to the outdoors, and thermal, visual, and acoustical comfort.

Suggested Graphics: Model photos, drawings or diagrams of daylight and ventilation strategies; test models.

Metric: Percent of the building that can be daylit (only) during occupied hours; Percent of floor area with views to the outdoors; Percent of floor area within 15 ft. of an operable window. Daylight performance using the following concepts: Daylight Availability, or Annual Sunlight Exposure along with Spatial Daylight Autonomy: % of regularly occupied area achieving at least 300 lux at least 50% of the annual occupied hours.



ASSIGNMENT:

1. Show consideration of access to daylight and outdoor spaces in conceptual models and sketches.
2. Write a vision statement that addresses occupant well-being and connection to nature in the project.

For Final Presentation:

3. Identify areas with direct views to the outdoors and areas within 15 feet of an operable window.
4. Run daylight performance analysis using the following concepts (via available software): Daylight Availability, or Annual Sunlight Exposure along with Spatial Daylight Autonomy: % of regularly occupied area achieving at least 300 lux at least 50% of the annual occupied hours.

5. In less than 100 words, describe design strategies for optimizing daylight, indoor air quality, connections to the outdoors, and thermal, visual, and acoustical comfort.

DELIVERABLES:

- **Daylighting Graphic** - daylighting analysis as ratio of daylit building space
- **Narrative on Design for Well-Being** (<100 words)

SUBMITTAL:

Submit as PDF via university interface (Blackboard, Canvas, Edmodo, Google...) using the following NAAB file format:

COURSENO_INSTRUCTOR_yourlastname_yourfirstname_ASSIGNMENT07_YEARTERM

DUE:

Resources:

[Daylighting Pattern Guide](#) provides insights to the effectiveness of different amounts of window or skylight area on providing adequate daylight.

Louv, Richard. Last Child in the Woods: Why Children Need Nature, How It Was Taken from Them, and How to Get It Back. Algonquin Books of Chapel Hill, 2005.

Botton, Alain De. The Architecture of Happiness. Penguin Books Ltd, 2014.

ACSA AIA COTE Top Ten Studio Guide

<https://www.acsa-arch.org/competitions/2021-cote-competition/studio-guide/#tools>

Associated NAAB Content:

Program Criteria

PC.2 Design—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

PC.3 Ecological Knowledge and Responsibility—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

PC.5 Research and Innovation—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

PC.6 Leadership and Collaboration—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

PC.7 Learning and Teaching Culture—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

PC.8 Social Equity and Inclusion—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Student Criteria

SC.1 Health, Safety, and Welfare in the Built Environment—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

SC.4 Technical Knowledge—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Illustration Credit COTE Top Ten Winner 2020

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