

Vertical Studio: ARCH 511 Adv Arch Design II Spring 2010 Semester

Credit Hours: 5

Title: Massive Change: Social Architecture in a Flat World

Instructors:

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Studio time: MWF 12:30-4:20pm

National Institutes of Health is interested in research related to

Information Technologies and the Internet in Health Services and Intervention Delivery

<http://grants.nih.gov/grants/guide/pa-files/PA-06-224.html>

framework for exploration

Our goal is first to connect this design research studio with social health issues across the globe. One of the most critical global issues today is the status of the quality of sustainable health care of the citizens of all nations. The concepts of life long health care in a global society are no longer valid as witnessed by recent international transmissions of numerous infectious diseases, chronic illness, life span ratios, cultural complexities and environmental stresses of both extreme poverty and rapid development.

In March 2001, the Institute of Medicine (IOM) released "Crossing the Quality Chasm: A New Health System for the 21st Century, which identified health information technology (HIT) as one of the four critical forces that could significantly improve clinical decision-making, patient safety, and overall quality of care. Over the past 30 years, research has demonstrated that HIT--including handheld technologies for gathering data, clinical information databases, clinical decision-making aids, internet resources-- can improve patient safety and quality of care. However, few facilities across the United States use health information technologies regularly to assist with clinical care, and little research has been conducted to guide health care organizations in optimal use of technologies. Similarly, the Internet remains a largely unresearched opportunity to improve access to health care.

-<http://grants.nih.gov/grants/guide/pa-files/PA-07-295.html>

With Architecture for Humanity in mind, our second goal is to look how can design play a critical role in dealing with global health issues? In part the semester will look at remote health service and issues of HIT delivery in disaster situations to both the victims and relief workers as well as remote military personnel. One component will deploy our HIT mental health laboratory to help disaster victims, military personnel across the globe cope with the surrounding situations and potential catastrophes by connecting them, via HIT, with health services and mental health professionals. The overall outcome of the semester will be the design/build* of deploy able prototypes and assess the effectiveness of this intervention model with a built prototype of the health care environment in the spring of 10.

Research and design projects outlined below will ask a series of research questions:

- Study of the use of technology to disseminate health-related information. How does information technology impact the packaging, transmission, and reception of information? This may include how IT influences the access, comprehension, and use of health information.
- Study of the use of technology as a medium through which effective treatment and preventive interventions can be delivered. (e.g. telemedicine) How does the use of technology impact the intervention? Are adaptations to the intervention required? Does use of technology fundamentally change the way interventions are conceptualized?
- Study of the use of technology as a medium for novel health-related interventions. How does the use of technology in the development of interventions impact access and quality of health-related interventions? Does use of technology impact how interventions are designed and delivered?

Project One- A Framework of Public Health

The initial educational mission of the studio is to research and explore the basic principles of health care, health information technology and mental health in cross cultural settings where there are clear and distinct "cross cultural" differences in policy, education, access, technology and care. The search will be for "critical conditions" and " best practices" as expressed through the matrix of the natural and built environments of each cultural condition.

Project Two- Critical Conditions

The initial design effort will be to develop a small scale portable facility to serve and support within the context of each selected culture a design response to a natural or man made critical emergency. There is a full range of situations that may be considered to serve the citizens in a crisis situation depending on the cultural context and the nature of the emergency conditions. The emphasis will be on conceptual, schematic and design development of the proposals.

*the build part is contingent on funding

SOCIAL RESOURCES

World Health Organization

<http://www.who.int/en/>

UN Habitat

<http://www.unhabitat.org/>

Global Urban Observatory?

Sustainable Cities Program

Massive Change - power of design in improving the welfare of humanity.

<http://www.massivechange.com/>

Architecture for Humanity

http://www.architectureforhumanity.org/?gclid=CNPj_OKa1ZgCFRBKbQod_j051A

Cameron Sinclair, the founder and executive director of Architecture for Humanity

<http://www.ted.com/pages/view/id/167>

YouTUBE channels:

<http://www.youtube.com/HEALTHDESIGN>

<http://www.youtube.com/HCDmagazine>

Design Charrette on youtube:

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