DEA 4530-6530:

Planning & Managing the Workplace: The Organizational Ecology of the Hospital

Course Overview

This course explores the planning, design and management of healthcare facilities and systems, with a focus on hospitals and the role Evidence-Based Design (EBD) can play in improving how the facility affects quality of care and the experience of patients and care-giving staff, as well as the operational efficiency and effectiveness of the healthcare facility.

Learning Goals

The course has several goals, including:

- Introducing students to relevant EBD and other research literature on health and design.
- Familiarizing students with current trends in hospital planning and design.
- Helping students understand the many factors that influence hospital planning and design, including regulatory factors, new technologies, market competition, rising consumer expectations, concerns about safety and security, and corporate culture and management philosophy.
- Developing students' ability to translate research and theory into feasible and innovative design recommendations that contribute to improving the quality of care, the patient and family experience, and the care providers' working environment.

Student Projects

Students develop skills related to the goals note above by doing the following three projects:

1) **Design Dilemma** (Individual Project)

A "design dilemma" is a critical design decision faced by planners and designers for which there is no clear, obvious solution. For example, should nursing units be centralized or decentralized; where should imaging facilities be located; how can the ED be designed to flex with unexpected demand; how should reception and waiting areas be designed; what is the best wayfinding approach, etc. A health architect and/or administrator involved in an actual project will present a specific dilemma in the form of a case study. Students will be responsible for developing a consulting report in which they recommend a specific solution *drawing on and grounded in the evidence-based design and research literature.* Students will present their recommendations to the project/hospital representatives in the form of a written (electronic) report and a very brief presentation.

2) Data Mining (Team Project)

Kaiser Permanente, the largest managed healthcare provider in the United States, is a leader in the use of research and evidence-based design to guide the planning and design of their hospital facilities. As part of their commitment to a research-driven approach to facility planning and design, they commission studies of their own facilities. In this project, students will work with the researcher/designer George Simmons, Jr., who conducted an extensive ethnographic study for Kaiser. A tremendous amount of information was collected, but not all of it was analyzed or used. In this project students will have access to the extensive Kaiser data

file, which takes the form of photographic images, field notes, interview notes, and other largely qualitative data. Small student teams will review this data file in depth and then, based on their own analysis and interpretation of the data, make specific recommendations to Kaiser about a) issues they should consider as they continue to work to improve facility designs; b) specific facility/system guidelines and specific design recommendations for improving the health, safety, and satisfaction of patients, their families, and staff.

3) Field Ethnography (Individual Project)

Drawing on the assigned readings, the Kaiser project, and lecture, students will do a short, intensive case study using *only* observational methods to explore a unit or department in a healthcare-type facility (e.g., hospital, convenient care, senior living, spa, fitness center) a specific issue selected by and of interest to the student (e.g., doc-nurse interaction, medication routines; staff-family interaction; waiting room behavior; wayfinding, etc.). The issue selected must lend itself to direct observation and be in an area that will be accessible to students (operating theater will not work, for example). Students will prepare a report that states the problem or issue they are exploring; describes the methods they used and why they selected them; presents the findings and analyzes them (i.e., makes sense of them in some organized, structured manner); and discusses the implications for practice (planning, design, technology, organization) based on their observations and other literature they have read over the semester. Students should also include a separate section that identifies *any* additional forms of data they would recommend collecting to better understand the issue they have selected to study.