

ID 8803 Special Topics: Health care data and design

Semester : Fall 2023 (Elective for ECE, CS, and ENVE, Year 1 and Year 2)
(For non-design students' space is limited)

Pre- &/or Co-Requisites: None

Description

The aim of the course is to consider the different elements of health care data and design. This course will cover elements of human anatomy, epidemiology, healthcare data, data visualization, data analysis, instrumentation, ethics, software design considerations, Usability, and product design. In addition, this course explores the future of wearable technologies for health by adopting various human-centered design methodologies to meet users' needs, abilities, and expectations. This course is intended for multidisciplinary collaboration among student and non-design students.

Course outline

- Human anatomy
- Epidemiology
- Geriatric population
- Healthcare data and analysis
- Health related instrumentation
- Human Centered design methodologies
- User needs, abilities, and expectations
- Software design and Usability
- wearable technologies for health
- Smart Home technologies for health

Class deliverables & grading

The class does not have exams and grading is based on individual assignments, individual projects, team projects, class discussion and presentations, peer to peer evaluations.