USER EXPERIENCE ENGINEERING

EBME 480R

COURSE DESCRIPTION: User Experience Engineering: Social, cognitive, behavioral, and contextual elements in the design of healthcare technology and systems. User-centered design paradigm from a broad perspective, exploring dimensions of product user experience and learning to assess and modify the design of healthcare technology. Practical utilization of user centered design method and assessment techniques for approaching a design. (3 credit hours)

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TEXTBOOKS: Mobile Persuasion, Fogg and Eckles. Also, Elements of User Experience, Jesse James Garrett.

ADDITIONAL MATERIAL: Reading references on Blackboard.

COURSE OBJECTIVES: This course is designed to provide the students with a basic understanding of user experience and build skills in practical assessment of healthcare product design.

COURSE GRADE:

- Quizzes (30%): ~ biweekly
- Homework (40%): 4 assignments, ~ biweekly
- Project (30%): Design, build and demonstrate an improved user interface model for an existing medical end-to-end solution.

LECTURE SCHEDULE:

WK 1 Overview of the design process
WK 2 Design for the consumer patient
WK 3 Design for the care team
WK 4 Designing for regulatory compliance
WK 5 Consumer patient: basic principles of design
WK 6 Consumer patient: mental models
WK 7 Consumer patient: working with tradeoffs
WK 8 Consumer patient: designing the end-to-end experience
WK 9 Consumer patient: user interface design
WK 10 Consumer patient: applying the principles by evaluating products
WK 11 Health care team: defining the team and usage contexts
WK 12 Health care team: workflow
WK 13 Health care team: designing the patient experience
WK 14 Health care team: user interface design
WK 15 Health care team: applying the principles by evaluating products

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