ISE 4320/IHE 6320 – Human-System Interaction and Design Thinking Principles

Course Description
Focus on understanding the iterative user-centered design and development approach for user interface design and user experience assessment. This course is designed as an active learning versus passive learning experience. Students are responsible for exploring and gathering relevant information and then constructing personally meaningful projects that add to individual knowledge and experience.

Offered both face-to-face and online
Undergraduate/Graduate level – 3 credit hours

Graduate Students are required to complete an extra assignment/presentation. Therefore for graduate grade will be out for a total of 120 points that would be scaled to 100 points versus the undergraduate of 100 total points.

Graduate Student Individual Project: All graduate students are required to perform a literature review related to a topic within human-computer interaction or interface design and to present the information in an oral presentation. You do not have to write a paper. But you must use references that will be reflected in your presentation. If you are a distance student you may use voice over on the PowerPoint slides, or if you live locally you are invited to give the talk in person if possible. Your presentation is due 24 hours before your scheduled date so they can be loaded onto the website.

Course Learning Objectives

Students enrolled in this course will learn to:

- Conduct Usability testing

- Provide recommendations for improving the user experience

- Design wireframes for human system interactions

- Assess usability requirements across the product life cycle

Course Learning Outcomes
Upon successful completion of this course, students can:

- Conduct Usability testing

- Provide recommendations for improving the user experience

- Design wireframes for human system interactions

- Assess usability requirements across the product life cycle

Tentative Weekly Schedule

Week 1	Introduction
	Usability Engineering Lifecycle
	User Profiles & Personas
Week 2	Use Case & Requirement Analysis
	Axure Introduction

Week 3	Axure Lab Session
	Task Analysis
Week 4	Card Sort
	Usability Goals & Design Guidelines
Week 5	Mid-term 1 Review
	Platform Capabilities
Week 6	Mid-term 1
	Conceptual Design
Week 7	Paper Prototyping
	Balsamiq Introduction
Week 8	Balsamiq Lab Session
	IRB Overview
Week 9	Data Gathering Methods – Ethnographic Research Methods
	Data Gathering Methods – Ethnographic Research Methods Activity
Week 10	Project Work Day
Week 11	Mid Term 2
	Style Guides
Week 12	Testing Methods – Setup Analysis
	Guest Lecture (TBD)
Week 13	Work on Project Presentation
	Project Presentations
Week 14	Project Presentations
Week 15	Finals Week