

Division of Integrative Systems and Design

# ISDN 3300 (Spring, 2022-23) **Interaction Design**

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## **ISDN 3300 – interaction Design**

## **Course Description:**

Interaction Design is a design practice to enhance the interaction between users and design solution. This course stresses user interaction with technology-based products, services or systems. It also studies the broader interaction design beyond merely interaction between users with computer platform that Human-Computer Interaction (HCI) focuses. Students will be introduced several forms of interaction design and their core design principles and tools improving user interaction. They include, Interaction Design (IxD) studying how to form a structure for users to act and react to the products, services or systems; User Experience Design (UX) exploring how to enhance a positive feeling for users while interacting with the products, services or systems; User Interface Design (UI) enhancing the positive experience through better design of the interface elements in the structure. For example, navigational components and screen layout on apps and websites, buttons and ergonomics on products, such as digital wearables.

# **Course Learning Outcomes:**

By the end of the course, students will be able to:

- 1. Understand the physiological and psychological aspects that shape the user experience
- 2. Define requirements through questionnaires and activities
- 3. Design and conduct usability experiments
- 4. Refine their design through insights acquired during experiments

### Grading:

Labs and Project Sessions (presentations/reports)	20%
Class Participation & Quiz	10%
Project	
Initial Presentation	20%
Mid-point presentation	20%
Final Presentation	30%
	<u>100%</u>

## Notes:

- Lab and Project session grading: Most lab or project session will be concluded by a short presentation of each group of students regarding the topics addressed during the session. The criteria for the presentation as well as the expected work will be announced at the start of each lab session.
- In-class attendance: Labs on Week 1 and 6 rely on specific hardware which would make face-to-face attendance preferable. Similarly, Week 12 activity would require most students to attend face-to-face to conduct usability experiments with sufficient participants.
- 3. The final project presentation and report will reflect on the design journey, from the initial problem definition to the final refinements that lead to the final interface.

## **Recommended Reading**

[1] Sharp, Helen, Y. Rogers, and J. Preece. "Interaction Design: Beyond Human-Computer Interaction. (Fifth)." (2019).

[2] Dix, Alan, Janet Finlay, Gregory D. Abowd, and Russell Beale. *Human-computer interaction*. Pearson Education, 2003.

[3] Lidwell, William, Kritina Holden, and Jill Butler. *Universal principles of design, revised and updated: 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design.* Rockport Pub, 2010.

[4] Norman, Kent, and Jurek Kirakowski, eds. *The Wiley Handbook of Human Computer Interaction Set*. John Wiley & Sons, 2017.

[5] Wickens, Christopher D., Sallie E. Gordon, Yili Liu, and J. Lee. *An introduction to human factors engineering*. Upper Saddle River, NJ: Pearson Prentice Hall, 2004.