CSI 3500 HUMAN COMPUTER INTERACTION

Computer Science and Engineering Department

Oakland University

Course Syllabus

SEMESTER: Fall 2023

CLASS LOCATION: Math and Science Center room 124 *or* Zoom

(see Attendance Policy) **DAY:** Tuesday and Thursday

TIME: 1:00 - 2:47 PM

PROFESSOR: Douglas Zytko
CONTACT: zytko@oakland.edu
OFFICE HOURS: by appointment
MY OFFICE: Engineering Center 544

MY RESEARCH LAB: Engineering

Center 557

Course Description:

This course surveys various components and techniques of Human Computer Interactions (HCI). Topics include the basic perceptual, cognitive, performance capabilities of people and external factors that affect these capabilities. Various tools and techniques for understanding and evaluating the interactions of people with technology are discussed. Systematic process for designing, prototyping, evaluating and revising interactive systems are studied.

Objectives:

- Students shall be able to analyze end-user pain points, goals, and capabilities to be considered while designing user interfaces.
- Students shall be able to assess the uses and limitations of interface design choices for addressing end-user goals.
- Students shall be able to design human centric user interfaces.
- Students shall be able to create and perform usability analysis.
- Students shall be able to use tools for designing user interfaces.

Course Prerequisites: A major standing in IT/CS

Textbooks:

- **1. About Face: The Essentials of Interaction Design** by Alan Cooper, Robert Reimann, David Cronin, and Christopher Noessel, 4th edition, published 2014, ISBN-13: 978-1118766576.
- **2. Sprint:** How to solve big problems and test new ideas in just five days by Jake Knapp, John Zeratsky, and Braden Kowitz, published 2016.

Introduction to the course:

"This is so easy to use!"

"Wow. Where can I download this?"

"It's just...simple."

"I love using this app."

At this point in your college education you might know *how* to build things. You might know how to make a website, an app, or a digital product. Practitioners of human computer interaction commonly focus on a different question: *what* should we make?

What makes a digital product easy to use, fun, enjoyable, simple, rewarding, and all-around great? What makes for a quality user experience?

This class aims to teach the skills, techniques, and practices regularly used by human computer interaction practitioners to answer *what* a digital product should do.

Grading Policy:

Homework: 25%

• Course projects: 75% x average peer review grade

Final numerical grades will be converted to letter grades as follows:

A ≥ 94	C ≥ 73
A-≥90	C-≥70
B+ ≥ 87	D+ ≥ 67
B ≥ 83	D ≥ 63
B-≥80	D-≥60
C+≥77	F < 60

Homework:

Examples of homework assignments include, but are not limited to:

- Evidence of weekly reading completion (typically highlighted sentences from the readings that the student wants to discuss in class)
- Online submission of group assignments/presentations
- In-class presentations of group work

Homework falls into two categories: individual assignments and group assignments. Group assignment submissions should be identical for all group members. All group members are expected to personally submit a copy of group assignments.

Refer to the class Moodle page for a detailed description of homework assignments.

Course projects:

Most of the homework assignments serve as practice for course projects. There are three course projects throughout the semester. Projects must be done in groups. Students are not allowed to work on projects individually. Groups will be formed in class.

Peer review:

Your fellow group members will provide feedback on your performance and contribution to group projects each time a group project is due.

<u>Anonymized</u> peer review feedback may be shared with underperforming students as a way to encourage them to improve their performance. Any hesitations about having peer review feedback shared may be brought to the professor's attention for additional consideration.

Assignment Submission Policy:

Assignments/projects turned in late will incur grade penalties unless excused. Acceptable excuses include, but are not limited to: a medical emergency, a career opportunity (e.g., job interview, conference attendance), and official university business. Evidence may be required for an excused absence at the professor's discretion (e.g., a doctor's note).

All assignments must be submitted on Moodle. Submissions will receive half credit if they are submitted within 1 hour and 47 minutes of the deadline. Submissions made after that point will receive a 0. All submission times are based on time stamps reported in Moodle. Technical difficulties (e.g., a slow Internet connection) will not be considered an acceptable excuse for late submissions.

All students are expected to submit a copy of group assignments on Moodle, including project submissions. You will not receive credit for a group assignment that you do not personally submit. All group assignment submissions should be identical; if a student submits a group assignment that differs from the rest of the group they will incur a grade penalty at the professor's discretion.

Attendance Policy:

This course involves synchronous lectures taught in hyflex format. What that means is that students can attend synchronous lectures either in-person or online. Students may also alternate their form of attendance through the semester (e.g., you may attend in-person one day and then online the next and so on). Regardless of which modality you choose, attendance during the scheduled lecture time is expected because the course relies heavily on in-class activities. This class cannot be successfully completed in an asynchronous format. I highly encourage you to coordinate with your group about how members will be attending class to ensure in-class collaboration is possible.

Academic Integrity:

Students who are suspected of academic dishonesty will receive a F in this course. Academic dishonesty includes, among other things, plagiarism (copying without acknowledging the source), unauthorized procurement, distribution or acceptance of examinations, giving or receiving assistance from an unauthorized source while completing an examination or assignment. You are expected to do your own work. You are allowed to work on project assignments with the members of your group. Plagiarism of any type will result in an automatic report to the University Official. You may find the "Academic Conduct Policy" on the OU website at http://www.oakland.edu/.

Technology Back-up Plan:

- In the event that your computer crashes or internet goes down, it is essential to have a "backup plan" in place where you are able to log in using a different computer or travel another location that has working internet.
- Any files you intend to use for your course should be saved to a cloud solution (Google Drive, Dropbox, etc.) and not to a local hard drive, USB stick or external disk. Saving files this way guarantees your files are not dependent on computer hardware that could fail.

Technology Help:

- For help using Moodle, use the Get Help link at the top of the Moodle page (moodle.oakland.edu).
- For access to technology and in-person assistance, call or visit the Student Technology Center (Link to Student Technology Center: https://www.oakland.edu/stc/).
- For general technology assistance, consult the OU Help Desk (Link to Help Desk: https://www.oakland.edu/helpdesk/).

MENTAL HEALTH RESOURCES

Oakland University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed,

and/or in need of support, services are available. For help, contact the OU Counseling Center in the Human Health Building at (248) 370-3465 or the SEHS Counseling Center at 250A Pawley Hall, (248) 370-2633, https://oakland.edu/counseling/sehs-cc/. Student resources can also be found at https://www.oakland.edu/deanofstudents/student-health-safety-resources/. For immediate 24/7 services contact Common Ground at https://commongroundhelps.org/#/ via chat or call or text the word "hello" to 1-

800-231-1127.