LOYOLA
UNIVERSITY CHICAGO
Preparing people to lead extraordinary lives

COMM 400 DESIGNING FOR DIGITAL ENVIRONMENTS

FALL 2023
THURSDAYS, 7 P.M. TO 9:30 P.M.
SOC ROOM 003

INSTRUCTOR	EMAIL
Minjin Rheu, PhD (She/Her)	mrheu@luc.edu
Assistant Professor	
OFFICE	OFFICE HOURS
SOC Room 216	Via Zoom or in-person by appointment

COURSE INTRODUCTION

This course is designed to provide you with an opportunity to design a digital product or content (e.g., interactive storytelling, websites, mobile apps, smart speakers, or even robots). You will plan, design, and create a prototype of a digital product of your choice to build your online portfolio. Good design does not come by simply from a spark of witty ideas or artistic inspiration. Designers should go through a comprehensive process considering various factors such as user experience, balance between form and function, problem-solving capabilities, and aesthetics.

Thankfully, the vast reservoir of knowledge in human psychology, cognition, and perception, which contributed to the birth of the fields of User Experience Design (UXD) and Human-Computer Interaction (HCI) is available to us to guide the process. This class will introduce you to these fields (UXD and HCI) and discuss different types of interfaces, design methodologies, and issues related to accessibility and equity in designing digital interfaces and technology.

Students who successfully complete this course will be able to:

1. Plan and execute design processes for digital products and content and evaluation of them.
2. Understand psychological and behavioral principles in the fields of UXD and HCI and apply the knowledge in design and evaluation processes
3. Consider and advocate for social justice, equity, and accessibility issues related to UXD and HCI

COURSE MATERIALS

There are five books that will guide this course. All of these books are available either as an eBook or print book through LUC libraries. We will also use a variety of materials from a broad range of sources. Additional readings or viewings will be posted on the Sakai page throughout the semester.

1. The Design of Everyday Things (2013 Edition) By Don Norman (ISBN: 9780465050659)
2. Designing for behavior change: Applying psychology and behavioral economics By Wendel, S. (ISBN: 9781449367985)
3. Design for Real Life by Eric Meyer and Sara Wachter-Boettcher (ISBN: 9781937557409)
4. Interaction Design: Beyond Human-Computer Interaction (5th Edition) By Preece, J., Sharp, H., & Rogers, Y. (ISBN: 9781119547259)
5. Designing the User Interface: strategies for effective human-computer interaction (6th Edition) By Shneiderman, B., Plaisant, C., Cohen, M. S., Jacobs, S., Elmqvist, N., & Diakopoulos, N. (ISBN: 9780321537355)

Where to find the books

1. Print books available in the library. 2002 edition available online via LUC libraries.
2. Available for free as an eBook through LUC Libraries
3. Available for fee as an eBook through LUC libraries
4. 4th Edition is available for free as an eBook through Loyola Libraries
5. Print books available in the LUC libraries

COURSE ACTIVITIES AND ASSIGNMENTS

Below is a table that breaks down the points of each graded assignment. Brief descriptions of the assignments are below the table.

TYPE	ASSIGNMENT	POINTS
Individual	Participation and Professionalism	150 points
Individual	Weekly Reflections and Class Discussion Leaders	150 points
Individual	Design Portfolio Part 1. One-pager Ideation Part 2. Midterm Project Part 3. Final Project (Online Portfolio and Presentation)	400 points
Group	Accessibility Case Study Presentation*	150 points
Group	Design Rehab Presentation*	150 points
Individual	Syllabus Quiz**	20 points
	TOTAL	1,000 Points

Group project score will be weighted based on the peer evaluation score.
*** The points for Syllabus Quiz will be counted as extra credit.*

Participation and Professionalism

Your participation and professionalism will account for 15% of the grade. Because it is a graduate-level class, your active engagement and participation in class is crucial. This score is not given, but rather, it is earned starting from zero point.

I expect you to be not only physically but also mentally present in the class. Your duty as a student is to attend class regularly, complete assigned readings, turn in assignments on their due dates, and regularly participate in class discussions. Much of the learning in this course will happen through our conversations with each other during class time. if a student is seen not paying attention in class (watching something on their laptop, texting, working on a different class's assignments, etc.) or does not engage in discussion with their fellow classmates on a regular basis, this will affect their score.

It is my responsibility and intent to create a class where each and everyone's unique value and integrity are appreciated and well respected, regardless of gender, sexuality, race, ethnicity, disability, age, socioeconomic status, and cultural background. This principle applies to both the professor (myself) and all members of the class. I urge you to be always considerate, respectful, and caring to your classmates. If your utterance or behavior is deemed inappropriate and disrespectful to any member of this class, including myself, you may be asked to leave the classroom. This will cause a heavy

deduction from participation and professionalism score, but ultimately, I wish you understand that this is a bigger issue than just losing some scores in a class.

Weekly Reflections and Class Discussion Leaders Scratch off the discussion leader thing?

Students are expected to complete reading/viewing assignments before class and be prepared to discuss them during class. In addition, to invigorate and enhance class discussions, students will choose one of the weekly topics to delve deeper into and do extra research to find reading/viewing materials related to the week's topic, which they will then share during class discussions. Those discussion leaders will be the expert of the week.

Design Portfolio Project

Part 1. One-pager Ideation

This One-Pager Ideation will be a stepping-stone for you to develop your class project. For this assignment, I would like you to start envisioning your final project. It can be any digital product of your choice (e.g., a mobile application, website, interactive storytelling, virtual or augmented reality, or a service robot). You will write a one-page draft of your idea for the final project and present it in Class on Week 4. It will include your motivation (why you want to design the object of your choice), problem statement, target users, etc. We will discuss these ideas as a class, and you will be expected to provide your feedback and thoughts on the ideas of fellow classmates.

Part 2. Midterm Project (150 points)

For the midterm project, I would like all of you to begin planning your final project. In this assignment, you will focus on the first half of the Design Portfolio Project. Specifically, you will conduct user research and give more concrete shape to your final project's concept. Your task is to submit a proposal that includes detailed information about what you intend to build, the steps you will take to ensure your design is accessible and equitable, and a timeline outlining how and when you will complete your project to ensure you have a tangible outcome to present and submit as your final work.

This will not only give you the opportunity to start building and planning well ahead of the final project but give you time and space to reflect on the principles we've learned so far and how you plan on applying and advocating for them in your own design.

Part 3. Final Project

The final project for this course will be the prototype of your design project posted on your finished online portfolio/website. Students will also be required to present their projects in class. In the finals' week, student will submit their final project (a working link to your website and presentation slides) as well as a reflection essay (up to 2pages long) on the process of creating and designing your own digital product, and how you'll apply the principles we learned in class moving forward in your careers.

More information about the Design Portfolio will be given in class over the course of the semester

Accessibility Case Study Presentation

This assignment is designed to expose you to a variety of accessibility and equity issues in interaction and UX design. In this assignment, you will build the ability to understand what makes something a piece of accessible and equitable design and critically assess existing designs through the lens of accessibility and equity – including if it reinforces (or does not reinforce) racism, sexism, classism, or ablism (both physical and cognitive). In this group assignment, each group will choose one of the three

given topics and unpack the issue of your group's choice and share your findings in class. If your group wish to propose an idea for another topic and do research on it, it is totally fine.

Bad Design Rehab Presentation

For this assignment, students will form groups, and as groups, you will choose a digital or non-digital product with bad and inconsiderate design and propose the ways that it can be improved. Examples of non-digital objects can include hostile architecture, crash test dummies, and more. Examples of digital objects can include things like VR headsets, smartphones (which are often too big for women's hands), and more. If you want to do a case study of a poorly designed app or user interface, that is also an option.

For this project, I want you to really flex your creative muscles and think out of the box. A good example is the marble answering machine that featured in Chapter 1 of Interaction Design: Beyond Human-Computer Interaction (5th Edition). You will give a 15-20 minute presentation about your project in class and will submit the presentation slides with presentation scripts. More information will be given about this assignment throughout the semester.

Syllabus Quiz (20 points Extra Credit)

Students will be required to pass a syllabus quiz about the course. You will have two attempts to earn a perfect score on the syllabus quiz. Once you pass you will earn 20 points Extra Credit.

More detailed information about the class assignments will be provided over the course of the semester. You are welcome to reach out to me discuss your questions or concerns anytime through email or meetings.

GRADING SCHEMES

There is a total of 1000 points that students can receive in this course. The grading scale is:

GRADE	POINTS
A	940+
A-	900 to 939
B+	870 to 899
B	840 to 869
B-	800 to 830
C+	770 to 799
C	740 to 769
C-	700 to 739
D+	670 to 699
D	640 to 669
F	639 or below

WEEKLY SCHEDULE

Please note that the instructor reserves the right to make changes in the course schedule and class assignments for the good of the class. Students should attend class and check Sakai and your email regularly to make sure you are aware of any changes.

WEEK	TOPICS	DUE DATES
Week 1 August 31	Introduction to the Course In-Class Activities: Introduce yourself and share how this class will help you	SYLLABUS QUIZ DUE BY September 1, EOD
Week 2 September 7	What is Designing for Digital Environment? What are good design and bad design? Reading & Viewing assignments on Sakai	
Week 3 September 14	What to Design? Design as a Method of Problem-solving In-Class Activities: Brainstorm your idea for the class project and share with the class Reading & Viewing assignments on Sakai	
Week 4 September 21	Who Are the Users? What Does Social Justice Have to Do with HCI and UXD In-Class Activities: Accessibility Test Class discussion on accessible and equitable design Reading & Viewing assignments on Sakai	ONE-PAGE IDEATION DUE IN CLASS (Submission on Sakai by Friday)
Week 5 September 28	Accessibility Case Study Presentation	ACCESSIBILITY CASE STUDY PRESENTATIONS DUE IN CLASS
Week 6 October 5	How to Design? Design Processes In-Class Activities: Design Rehab project ideation as a group Work on the Midterm Project Reading & Viewing assignments on Sakai	
Week 7 October 12	Midterm Break – WFH Individual meetings by request via Zoom or In-person	
Week 8 October 19	Psychology of HCI and UXD – Cognition In-Class Activities: Class discussion led by the expert of the week Reading & Viewing assignments on Sakai	MIDTERM PROJECT DUE BY November 4, at 11:59PM

Week 9 October 26	Psychology of HCI and UXD – Affect In-Class Activities: Class discussion led by the expert of the week Reading & Viewing assignments on Sakai	DESIGN REHAB PRESENTATION DUE IN CLASS
Week 10 November 2	Psychology of HCI and UXD – Humans are social, are computers social? In-Class Activities: Class discussion led by the expert of the week Reading & Viewing assignments on Sakai	DESIGN REHAB PRESENTATION DUE IN CLASS
Week 11 November 9	How to Design? The Practice of Design In-Class Activities: Share your progress with the class Reading & Viewing assignments on Sakai	For week 11, 12 Discussion Leaders can do read design articles (CHI etc.) and introduce it as an example
Week 12 November 16	Prototyping In-Class Activities: Share your progress with the class Reading & Viewing assignments on Sakai	
Week 13 November 23	NO CLASS – HAPPY THANKSGIVING ☺	
Week 14 November 30	PRESENTATIONS OF FINAL PROJECTS	
Week 15 December 7	PRESENTATIONS OF FINAL PROJECTS	
Week 16	FINAL PROJECT MATERIALS (LINK TO FINISHED SITE AND REFLECTION) DUE ON THE FINALS DAY	

OTHER IMPORTANT COURSE POLICIES

EMAIL AND COMMUNICATION

I will try to respond to emails within 24 hours during the week. If you contact me during the weekend or holidays, it may take more time for me to get back to you. Although I will try my best to respond to your email as soon as I am able, if you have not received any response during this period, please feel free to approach us again to ensure your communication was received. Also, Students are responsible for any information distributed via email and/or Sakai. Please check Sakai and your Loyola email accounts regularly to stay up-to-date on announcements.

LATE WORK POLICY

Life happens. Therefore, I strongly encourage you to plan ahead to complete your work by the due date. You are expected to turn in all assignments on their assigned due dates and times. If you think you cannot submit the work by the assigned time, make sure that you communicate it with me in advance. Late work will only be accepted in certain situations, including but not limited to illness or family emergencies. If an assignment is turned in late without prior communication with me, it will receive a zero.

ACADEMIC HONESTY AND INTEGRITY

Academic integrity is the pursuit of scholarly activity in an open, honest, and responsible manner. Academic integrity is a guiding principle for all academic activity at Loyola University Chicago, and all members of the University community are expected to act in accordance with this principle. Failing to meet the following standard is a serious violation of personal honesty and the academic ideals that bind the University into a learning community. These standards apply to both individual and group assignments. Individuals working in a group may be held responsible if one of the group members has violated one or more of these standards.

1. Students may not plagiarize.
2. Students may not submit the same work for credit for more than one assignment (known as self-plagiarism).
3. Students may not fabricate data.
4. Students may not collude.
5. Students may not cheat.
6. Students may not facilitate academic misconduct.

Academic cheating is a serious act that violates academic integrity. Cheating includes, but is not limited to, such acts as:
- Obtaining, distributing, or communicating examination materials prior to the scheduled examination without the consent of the instructor
- Providing information to another student during an examination
- Obtaining information from another student or any other person during an examination

- Using any material or equipment during an examination without the consent of the instructor, or in a manner which is not authorized by the instructor
- Attempting to change answers after the examination has been submitted
- Unauthorized collaboration, or the use in whole or part of another student's work, on homework, lab reports, programming assignments, and any other course work which is completed outside of the classroom
- Falsifying medical or other documents to petition for excused absences or extensions of deadlines
- Any other action that, by omission or commission, compromises the integrity of the academic evaluation process

Plagiarism is a serious violation of the standards of academic honesty. Plagiarism is the appropriation of ideas, language, work, or intellectual property of another, either by intent or by negligence, without sufficient public acknowledgement and appropriate citation that the material is not one's own. Plagiarism involves taking and using specific words, phrases, or ideas of others without proper acknowledgement of the sources. Students may not:

- Submit material copied from a published or unpublished source.
- Submit material that is not cited appropriately.
- Use another person's unpublished work or examination material.
- Allow or pay another party to prepare or write an assignment.
- Purchase, acquire, or use a pre-written assignment for credit.

The above list is in no way intended to be exhaustive. Students should be guided by the principle that it is of utmost importance to give proper recognition to all sources. To do so is an act of personal and professional courtesy, as well as intellectual honesty. Any failure to do so, whether by intent or by neglect, whether by omission or commission, is an act of plagiarism.

Your assignments will be checked for originality using academic honesty software. If you turn in an assignment that contains plagiarized material, you will receive zero points. This is *non-negotiable*.

In addition, a student may not submit the same paper or other work for credit in two or more classes without the expressed prior permission of all instructors. A student who submits the same work for credit in two or more classes without the expressed prior permission of all instructors will be judged guilty of academic dishonesty and will be subject to sanctions described below. This applies even if the student is enrolled in the classes during different semesters. If a student plans to submit work with similar or overlapping content for credit in two or more classes, the student should consult with all instructors prior to submission of the work to make certain that such submission will not violate this standard.

The use of AI language models, such as ChatGPT, for the creation of written assignments Is strictly discouraged and considered a form of plagiarism. While AI can be a valuable tool for research and generating ideas, it is essential to understand that using AI-generated content without proper attribution or without contributing significant original thought constitutes academic dishonesty. Students are expected to engage actively in the writing process, exercise critical thinking, and develop their own ideas and arguments in all assignments. Any instances of using AI-generated content without proper citation and original input will be treated as a violation of academic integrity, and appropriate actions will be taken in accordance with the university's policies on plagiarism.

Plagiarism or any other act of academic dishonesty will result minimally in the instructor's assigning the grade of "F" for the assignment or examination. The instructor may impose a more severe sanction, including a grade of "F" in the course.

All instances of academic dishonesty must be reported by the instructor to the chairperson of the department involved, and to the Dean of School of Communication. The office of the Dean of the School of Communication may constitute a hearing board to consider the imposition of sanctions in addition to those imposed by the instructor, including a recommendation of expulsion, depending on the seriousness of the misconduct. In the case of multiple instances of academic dishonesty, the Dean's office may convene a separate hearing board to review these instances.

The student has the right to appeal the decision of the hearing board to the Dean of SOC. If the student is not a member of the SOC, the dean of the college in which the student is enrolled shall be part of the process. Students have the right to appeal the decision of any hearing board and the deans of the two schools will review the appeal together. Their decision is final in all cases except expulsion. The sanction of expulsion for academic dishonesty may be imposed only by the Provost upon recommendation of the dean or deans. Students have a right to appeal any finding of academic dishonesty against them. The procedure for such an appeal can be found at: http://www.luc.edu/academics/catalog/undergrad/reg_academicgrievance.

The School of Communication maintains a permanent record of all instances of academic dishonesty. The information in that record is confidential. However, students may be asked to sign a waiver which releases that student's record of dishonesty as a part of the student's application to a graduate or professional school, to a potential employer, to a bar association, or to similar organizations. (The School of Communication policy is consistent with the Academic Integrity Policy of the College of Arts & Sciences.)

Please refer to the following sources for further information.
- https://www.luc.edu/academics/catalog/undergrad/reg.shtml
- http://www.plagiarism.org/

INTELLECTUAL PROPERTY

All lectures, notes, PowerPoints, and other instructional materials in this course are the intellectual property of the professor. As a result, they may not be distributed or shared in any manner, either on paper or virtually without my written permission. Lectures may not be recorded without my written consent; when consent is given, those recordings may be used for review only and may not be distributed. Recognizing that your work, too, is your intellectual property, I will not share or distribute your work in any form without your written permission.

LIMITS TO CONFIDENTIALITY

Under the Illinois Abused and Neglected Child Reporting Act, all personnel of institutions of higher education are classified as "mandated reporters" who must report to the Illinois Department of Children and Family Services (DCFS) if the reporter has reasonable cause to believe that a minor under 18 years of age known to the reporter in his or her official or professional capacity may be abused (physically or sexually) or neglected.

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including professors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of Loyola University Chicago community members and others. If you would like to talk about issues that are threatening your own health and safety in a more confidential setting, I encourage you to make an appointment with the [LUC Health Center](#).

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Any student with a disability that needs special accommodation during exams or class periods should provide documentation from the Student Accessibility Center to the instructor.

The instructor will accommodate that student's needs in the best way possible, given the constraints of course content and processes. It is the student's responsibility to plan in advance in order to meet their own needs and assignment due dates.

ACCOMMODATIONS FOR STUDENTS WITH CHILDREN

Students who are the caretakers, guardians, or parents of children are allowed to bring their children with them to class in the event of an emergency, if childcare plans fall through, etc.

Please let me know ahead of time if you will be bringing your child/children to class and also sit near the door in the event that the student needs to leave the classroom to tend to the child/children. If the child/children are using devices like phones, tablets, etc., to entertain them during class time, I also ask that the student who is their caretaker/guardian/parent to make sure to provide headphones as to not disturb the rest of the class.