INF385C : Human-Computer Interaction Syllabus – Fall 2024

Instructor: Dr. Jacek Gwizdka

Office: 5.532

Office Hours: By appointment (in person or online)

Email: jacekg@utexas.edu (always include INF385C in the email's subject)

Note: direct email is by far the best way to contact your instructor

Teaching Assistant (TA): Li Shi Email: lilylashi@utexas.edu

(all course-related messages should be sent to the assistant and to the course instructor)

Class Meets: Wednesdays 12pm-3pm in UTA 1.208

Canvas @ UT: https://utexas.instructure.com/

Course Schedule: a separate one-page document on Canvas (look under Canvas Syllabus)

Course announcements and mailing list: through Canvas

UNIVERSITY CATALOG COURSE DESCRIPTION

The history and importance of human-computer interaction (HCI), theories of HCI design, modeling of computer users and interfaces, empirical techniques for analyzing systems and interfaces, interface design, and styles of interaction. Emphasis on reviewing research papers, current works, and future directions in HCI research.

DETAILED COURSE DESCRIPTION

This course will introduce you to human-computer interaction theories and design processes. The emphasis will be on applied user experience (UX) design. However, the course will start by discussing fundamental aspects of human perception and cognition and linking them with design principles. The course will present an iterative evaluation-centered UX lifecycle and will introduce you to a broader notion of user experience, including usability, usefulness, and emotional impact. The lifecycle should be viewed as template intended to be instantiated in many different ways to match the constraints of a particular development project. The UX lifecycle activities we will cover include contextual inquiry and analysis, requirements extraction, design-informing models, design thinking, ideation, sketching, conceptual design, and formative evaluation.

It is a goal of this course to help students realize that UX design and engineering is an ongoing process throughout the full product life cycle, and developing the human-computer interface is not something to be done at the last minute, when the "rest of the system" is finished.

Class time will be split between content-based lectures, discussions and in-class project-related activities to demonstrate techniques and principles and to practice the skills being presented. The part of class time used for lectures will be devoted to highlighting course materials, questions,

and discussion. The composition of individual class meetings will differ somewhat throughout the semester.

Outside of the classroom, students will acquire more in-depth hands-on experience in applying these skills and techniques in a semester-long team project. In this project, students will develop a usable interaction design for their own application system in a UX project for a "client".

LEARNING OUTCOMES

The objective of this course is for students to learn fundamentals of human perception and cognition, to learn how to conduct user research, how to design, prototype and evaluate user interfaces. Students will learn user interaction design principles through theory and practice. At the end of this course, you will be able to:

- understand the main concepts in human computer interaction;
- understand the fundamentals of human perception and cognition and their implications for user experience and interaction design;
- conduct research to learn about user needs and human uses of technology;
- undertake iterative and inexpensive user-centered design methods;
- design and prototype user interfaces;
- understand and apply interaction design guidelines;
- identify the strengths and weaknesses of interfaces and provide suggestions of how to improve them;
- perform basic user interface evaluation and usability testing;
- undertake further training and research in this area.

UNIVERSALITY AND BREADTH OF APPLICABILITY

The process, principles, and guidelines are universal and applicable to any kind of design that involves interaction between humans and non-human systems in the broadest sense. The material of this course applies not just to GUIs and the Web but to all kinds of interaction styles and devices, including ATMs, refrigerators, elevator buttons, road signs, ubiquitous computing, embedded computing, and everyday things.

HANDS-ON, PRACTICAL APPROACH

This course takes a practical, applied, hands-on approach, based on the application of established best practices, principles, and proven methods to ensure a quality user experience.

My goal for you is to introduce you to the activities of the UX lifecycle process and to give you opportunity to gain some practical experience with them. You are exposed to each activity in several ways. First you read about it in the book, then the instructor will review the highlights in lectures. Then we will discuss topics in the class. Topics and discussions will be enriched by your short presentations in most of class meetings. Finally, you will apply your newly learned skills in a somewhat realistic hands-on situation through your semester-long team project assignments.

HUMAN PSYCHOLOGY FOUNDATIONS

HCI is rooted in human psychology. Good understanding of design principles and guidelines and their effective application requires knowledge of their scientific underpinnings. Therefore, the course will start with covering theoretical topics.

MY PERSONAL GOALS FOR YOU IN THE COURSE

In addition to content-specific objectives reflected by the topics in the course calendar, I have these personal goals for each student:

- to get you to think deeply and carefully about the subject,
- to help you to genuinely like the subject,
- to provide knowledge and skill useful to you in your career,
- to engender a deeper interest (perhaps in some of you) that can be pursued beyond this course,
- to make you proud of your achievements in this course, especially of your project work, and,
- hopefully, have a little fun in the process.

WARNING: Occasionally we get students with considerable experience in HCI/UX. You are still welcome to participate in this course, but be warned that this is not an advanced course in HCI/UX. Although this course gives thorough treatment to the HCI/UX process, it is an **introductory** course.

REQUIRED MATERIALS

The main textbook for this course is:

UX: The UX Book. Agile UX Design for a Quality User Experience. <u>Second Edition</u> by Hartson and Pyla, Morgan Kauffman, **2019**. (Book website: http://www.theuxbook.net/). The book is available online through UT libraries: https://www-sciencedirect-com.ezproxy.lib.utexas.edu/science/article/pii/B9780128053423099896?via%3Dihub

OTHER REQUIRED BOOKS AND READINGS

JJ20: Johnson, J. (2020). Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines. Elsevier (3rd Edition). Available online at UT: http://utxa.eblib.com.ezproxy.lib.utexas.edu/patron/FullRecord.aspx?p=1584420

DN13: Norman, D. (2013). Design of Everyday Things: Revised and Expanded. New York: Basic Books. Available online at UT libraries: http://site.ebrary.com.ezproxy.lib.utexas.edu/lib/utexas/detail.action?docID=10778063

CLASS LECTURE SLIDES AND OTHER HANDOUTS

For your reference, the PDF versions of class lecture slides will be posted on Canvas. Assignments and project descriptions are also posted on Canvas. The files posted on Canvas will be either linked to Canvas Syllabus/Calendar or available directly in the Files section. You have my permission to use them as a part of this class. Please do not share course materials with others.

HOMEWORK

The major work outside the classroom is the team project (see below). In addition, there will be one assignment. Due dates are in the course schedule/calendar. Even if the instructor doesn't announce each homework in class, it's your job to know when you should be working on one and when they are due. Ask when in doubt. One other type of homework will be the weekly reading assignments described below.

Submitting written homework and project assignments

You must prepare your assignments using a word processor and submit it by uploading to Canvas by the due date/time. Please always use appropriate three- or four-letter file extensions in submitted filename (e.g., .docx for Word files, .pdf for Adobe portable document format). Please do not submit links to cloud documents (e.g., Google documents). An exception to this are, for example, prototypes created on Figma or similar platforms. Assignments usually may not be submitted via email to either the professor or the TA.

All documents that you are submitting should include on the front page of your submission your name (spelled in the same way as in the course roster), course number/name, instructor's name, semester and the date of submission. For group work, please also always include on the front page all group member names, your project group number, and your project short name (or title).

GRADING POLICY AND ASSIGNMENTS

ndividual assignments				
Design Critique (DC) or Article Presentation (AP) or Your UX Story (YUX), or Discussion				
Leading (D) (ongoing, in class presentations, once)		5%		
Reading assignments and participation in online discussions on Canvas (whole semester)				
End-of-class (EOC) questions (whole semester)		5%		
Assignment 1 (Design Analysis)		5%		
Assignment 2 (Final reflections & lessons learned from the project)		10%		
Project - Teamwork		70%		
Project 0: Topic idea	0%			
Project 1: Topic selection and product concept statement	0%			
Project 2: Usage research data elicitation and analysis	10%			
Project 3: Requirements and modeling	10%			
Project 4: Design	10%			
Project 5: Prototype (wireframes + pilot test)	10%			
Project 6: Evaluation and reporting	10%			
Project 7: Final presentation	5%			
Project 8: Final project report	15%			
Total		100%		

GRADING SCALE

- 96 or above (A superior)
- 90-95 (A- distinguished)
- 87-89 (B+ good)
- 84-86 (B satisfactory)
- 80-83 (B- barely satisfactory)
- unsatisfactory: 77-79 (C+), 74-76 (C), 70-73 (C-).

Note: Final grading does not happen just by calculations. I take into account many factors, and so your "Canvas points/%" are only a rough indication of the final grade. Ask when in doubt.

READING ASSIGNMENTS

You are responsible for keeping up with readings in the book per the schedule given in the course schedule/calendar. All assigned readings are to be done before a class meeting (except our first meeting, of course). You are required to **post at least one discussion question** relevant to the assigned weekly reading on the designated Canvas discussion area (please note there may be more than one topic per week) <u>and</u> respond to at least one question posted by another student. Your questions should be in depth and sufficiently detailed to demonstrate that you read the assigned material (and not just skimmed it). Questions should not be too short (e.g., <10 words) or too long (e.g., > 200 words; these numbers are just rough guidelines). Questions should show you critical analysis of each reading and should not be superficial. Any student, TA or an instructor may post responses to online questions. The deadline for posting questions is Sunday evening 10pm (62 hours) before the class meeting time. Be prepared to discuss your questions during class meeting. Responses should be posted by Tuesday noon.

IN-CLASS PRESENTATIONS

Design Critique or Article Presentation or Your UX story

Most weeks (as posted on Canvas) between two and four students will be asked to make a presentation of one of the three types. **1.** A short **design critique** of a human-machine interface (you should be able to show the images of an interface or a device). **2.** Another type of an ongoing presentation will be a presentation of an online article on a topic of **AI in HCI** (best if related to the weekly class topic). If more than one student is presenting, they should coordinate their article selection so that there is no overlap. **3.** The third type of presentation is telling a story from your UX experience (for example, about a problem you solved, about something unexpected you learned from users, about a UX technique you learned that is not covered in this course).

All presentations should be short and to the point (from 5 to 10 minutes). You should prepare *slides* (or other visuals) and **upload them to Canvas 24 hours before the class meeting time**. More information is posted on Canvas under Assignments.

Discussion Leading (selected weeks as posted on Canvas)

Most weeks (please consult Canvas for specific weeks) one or two students will be assigned to lead discussion on the weekly readings.

The discussants are required to come prepared to take a leading role in-class discussion. The discussants should be familiar with related questions posted by classmates on Canvas and be able to summarize them and possibly try to answer some of them. Discussion leading should be supported by slides (submitted to Canvas by Tuesday at 10pm). More information is posted on Canvas under Assignments.

The major work (and the major part of course grade) component for the course is the semester team-oriented development project. It involves defining, analyzing, specifying, designing, prototyping, and evaluating an interaction design for a realistic problem area that you select. The purpose of the project is to give you exposure to all steps involved in developing a significant user interaction design. The project will include seven phases listed above in the grading table. The project assignments are described in detail separately.

This is a team project (except part #6 (evaluation) and individual assignment 2 with your final reflections. I will assign students to teams, trying to balance knowledge, skills, and backgrounds, based on a demographic survey given the first day/week of class. All development activities, including writing the deliverables, are team activities. All team members are to participate in all project activities. Do **not** go too far in the direction of dividing the overall process among the team members. Even though this might seem like a more efficient way to proceed, this leads to a kind of specialization that poses a barrier to each person learning the overall process.

The project grading process

The TA and the instructor typically work together in grading your submissions. Teams will be operating under somewhat varying conditions, reflecting various real-world development situations. Therefore, expectations for different teams will vary, as will the bases for grading project deliverables, so this is not about comparing the final products or deliverables across teams. The emphasis in this class is on learning the process and your project deliverables will be graded with that perspective.

The objective part. The first thing we assess objectively is whether all requirements are met. Mechanical aspects such as formatting, labeling, grammar, spelling, following instructions, etc. are easy to grade because they are objective. Since these mechanical aspects are just expected, we don't give positive points for those, but we may *deduct* points if they are wrong or missing.

The subjective part. The hard part in grading is the subjective part, which is about quality of content. Your submissions will be sorted in an approximate order of overall quality. We then take a second look and discuss relative merits of your work. In this process we calibrate our judgments. There are two components to this subjective evaluation: how well requirements are met (how well you did the job) and how well you reported it. Our evaluation of these components is based on our own knowledge and experience and is necessarily somewhat relative among the project teams of the class. The "how well you met requirements" part is based on our perception of how much you put into it, how completely you pursued the assignment, and how well you understood, interpreted, and applied the material covered in class to your project. We will try to write comments about these qualitative parts, so you know what aspects of your work and writing are possible issues.

Teamwork

Each member of the team is expected to contribute equally to each part of the project. It is possible that one of the most difficult parts of the project assignments is working well together in a group. It is understood that the effort each of you put into project phases may fluctuate given your skillset. Be aware of possible group problems and be ready to solve them. Don't make the

mistake of taking this aspect for granted or waiting for it to fix itself; you have too much at stake. Sometimes, despite our best efforts, some team members end up not pulling their fair share of the weight. If you encounter such problems please contact your instructor as early as possible. The instructor will work with a group to help you solve problems.

CLASS PARTICIPATION

Class participation includes presentation of assigned materials in the classroom, active role in inclass activities as well as active participation in classroom discussions.

UNIVERSITY AND COURSE POLICIES

Due dates and times for handing in homework and project assignments

All homework and project assignments must be turned in at the beginning of class on the due date. You should think of all due dates for assignments, especially project assignments, as firm. The tight schedule of deliverables throughout the whole semester makes it nearly impossible to extend due dates. Any assignment that you do not hand in on time may be penalized in grading. If you are not able to complete an assignment by the due date, it would be best for you to hand in as much of it as you have done. It will help if you notify us about special circumstances that will adversely affect completion of an assignment.

Attendance

You will not be graded directly on attendance. You are adults in a graduate-level course and are *expected* to be present for all course-related activities. Beyond the occasional need to be absent from class for a good reason, please consider that much of the learning for the course occurs in class. You cannot participate in this learning if you are not present.

If you are absent or unable to participate on the day that your team meets, you are responsible for providing your team with the necessary information to compensate for your absence. It is crucial to keep in communication with your team members; you are responsible for letting both us and your team know if you cannot make it to a class.

Excused Absence: The only absences that will be considered excused are for religious holy days or extenuating circumstances due to an emergency. If you plan to miss class due to observance of a religious holy day, please let us know at least two weeks in advance. For religious holy days that fall within the first two weeks of the semester, the notice should be given on the first day of the semester. You will not be penalized for this absence, although you will still be responsible for any work you will miss on that day if applicable. Check with us for details or arrangements.

If you have to be absent, use your resources wisely. Ask your team and other classmates to get a run-down and notes on any lessons you miss. If you find there are topics that we covered while you were gone that raise questions, you may come by during office hours or schedule a meeting to discuss. Email specific questions you have in advance so that we can make the most of our time. "What did I miss?" is not specific enough.

If you have to miss class for an extended period due to a protracted illness or similar reason, we will treat your needs as a special case and I will do everything I can to help you survive.

Q Drop Policy

If you want to drop a class after the 12th class day, you'll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop

Class Recordings:

Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

Sharing of Course Materials is Prohibited

No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. The University is well aware of the sites used for sharing materials, and any materials found on such sites that are associated with a specific student, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity (Student Conduct and Academic Integrity) in the Office of the Dean of Students (Office of the Dean of Students). These reports can result in sanctions, including failure of the course.

Computer use in the classroom

You can use your laptops and other computing devices (e.g., tablets, smartphones) in the classroom. However, their use during class time is <u>restricted</u> to the course-related activities. Students who use their devices for non-class related activities will be excused from the class and may have participation points deducted

E-mail Notification Policy

In this course e-mail will be used as the main means of communication with students. You will be responsible for checking your e-mail regularly for class work and announcements. If you are an employee of the University, your e-mail address in Canvas is your employee address.

Please make sure that your email is configured in such way as to show your name in the same way as it appears on the official course roster. This most likely means that it should be spelled using Latin alphabet characters only.

All email messages you send concerning the class should be addressed to the TA with a copy to the instructor. We will sort out which of us should act on the message and will make every effort to answer your email in a timely fashion. However, you should not necessarily always expect to get an immediate reply. In particular, don't expect to get answers to questions about a homework or project assignment within the last few hours before that assignment is due. Please put INF385C as part of the subject line of your email; that will help us identify your emails more quickly.

The University has an official e-mail student notification policy. It is the student's responsibility to keep the University informed as to changes in his or her e-mail address. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University-related communications, recognizing that certain communications may be time-critical. Read the policy: http://www.utexas.edu/its/policies/emailnotify.html.

You can find and change your official email address of record at : https://utdirect.utexas.edu/apps/utd/all_my_addresses

STUDENT RIGHTS & RESPONSIBILITIES

- You have a right to a learning environment that supports mental and physical wellness.
- You have a right to respect.
- You have a right to be assessed and graded fairly.
- You have a right to freedom of opinion and expression.
- You have a right to privacy and confidentiality.
- You have a right to meaningful and equal participation, to self-organize groups to improve your learning environment.
- You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded or diminished in any way.

With these rights come responsibilities:

- You are responsible for taking care of yourself, managing your time, and communicating
 with the teaching team and with others if things start to feel out of control or
 overwhelming.
- You are responsible for acting in a way that is worthy of respect and always respectful of others.
- Your experience with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the quality of your peers' experiences.
- You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
- You are responsible for holding yourself accountable to these standards, holding each other to these standards, and holding the teaching team accountable as well.

ACADEMIC INTEGRITY

Each student in the course is expected to abide by the University of Texas Honor Code: "As a student of The University of Texas at Austin, I shall abide by the core values of the University and

uphold academic integrity." Plagiarism is taken very seriously at UT. Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are encouraged to discuss assignments with classmates, but anything submitted must reflect your own, original work. If in doubt, ask the instructor.

Students who violate University rules on academic dishonesty are subject to severe disciplinary penalties, such as automatically failing the course and potentially being dismissed from the University. **PLEASE** do not take the risk. We are REQUIRED to automatically report any suspected case to central administration for investigation and disciplinary hearings. Honor code violations ultimately harm yourself as well as other students, and the integrity of the University, academic honesty is strictly enforced. You are responsible for understanding UT's Academic Honesty and the University Honor Code which can be found at the following web address: https://deanofstudents.utexas.edu/conduct/standardsofconduct.php

The use of generative AI tools (genAI)

The creation of artificial intelligence tools for widespread use is an exciting innovation. These tools have both appropriate and inappropriate uses in classwork. The use of artificial intelligence tools (such as ChatGPT, Gemini, Llama, Claude, Perplexity, Elicit, and any other and generative language models (LLMs), generative programming tools or generative multimodal tools) in this class shall be permitted on a limited basis. Generally, allowed are "local" uses, while "global" uses are not. "Local" uses include using an LLM to check or improve language of a phrase or a sentence. Prohibited "global" uses include using AI to generate outlines, answer questions, solve problems, improve or create original language for large sections of an assignment, or rewrite a whole assignment. Further allowed uses include situations when, a) you are preparing an in-class article presentation on AI in HCI: you are allowed to use generative AI tools to try out or illustrate the topic of your article; b) generating design ideas or wireframes: you are allowed to generate individual designs and their variations. In all cases, the use of AI should be properly attributed. You should be explicit where and how you used a genAI tool, and provide appropriate citations. When using genAI to find information, you should always ask it for citations/links and verify sources before including information from genAl in your assignment. You are also welcome to seek my prior-approval for other uses of genAl tools on any assignment.

Using AI writing tools without my permission, or failing to properly cite AI even where permitted, shall constitute a violation of UT Austin's Institutional Rules on academic integrity.

UNIVERSITY RESOURCES FOR STUDENTS

DISABILITY & ACCESS (D&A)

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Disability & Access (D&A). Please refer to the D&A wwebsite for contact and more information: http://diversity.utexas.edu/disability/. If you are already registered with D&A, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.

Counseling and Mental Health Center (CMHC)

I urge students who are struggling for any reason and who believe that it might impact their performance in the course to reach out to me if they feel comfortable. This will allow me to provide any resources or accommodations that I can. If immediate mental health assistance is needed, call the Counseling and Mental Health Center (CMHC) at 512-471-3515 or you may also contact Bryce Moffett, LCSW (iSchool CARE counselor) at 512-232-2983. Outside CMHC business hours (8a.m.-5p.m., Monday-Friday), contact the CMHC 24/7 Crisis Line at 512-471-2255. CMHC website: https://cmhc.utexas.edu/index.html

The Sanger Learning Center

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please

visit http://www.utexas.edu/ugs/slc or call 512-471-3614 (JES A332).

Undergraduate Writing Center: http://uwc.utexas.edu/

Libraries: http://www.lib.utexas.edu/
ITS: http://www.utexas.edu/

Student Emergency Services: http://deanofstudents.utexas.edu/emergency/

BeVocal

BeVocal is a university-wide initiative to promote the idea that individual Longhorns have the power to prevent high-risk behavior and harm. At UT Austin all Longhorns have the power to intervene and reduce harm. To learn more about BeVocal and how you can help to build a culture of care on campus, go to: https://wellnessnetwork.utexas.edu/BeVocal.

IMPORTANT SAFETY INFORMATION

If you have concerns about the safety or behavior of fellow students, TAs or professors, contact BCCAL (the Behavior Concerns and COVID-19 Advice Line) at https://safety.utexas.edu/behavior-concerns-advice-line or by calling 512-232-5050. Confidentiality will be maintained as much as possible, however the university may be required to release some information to appropriate parties.

CLASSROOM SAFETY

• For any illness, students should stay home if they are sick or contagious, not only to stop the spread, but also to promote their personal wellness.

CAMPUS SAFETY INFORMATION

The following are recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767,

- Occupants of buildings on The University of Texas at Austin campus must evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- For more information, please visit emergency preparedness: https://preparedness.utexas.edu/

CARRYING OF HANDGUNS ON CAMPUS

Texas' Open Carry law expressly prohibits a licensed to carry (LTC) holder from carrying a handgun openly on the campus of an institution of higher education such as UT Austin. Students in this class should be aware of the following university policies:

- Students in this class who hold a license to carry are asked to <u>review the university</u> policy regarding campus carry.
- Individuals who hold a license to carry are eligible to carry a concealed handgun on campus, including in most outdoor areas, buildings and spaces that are accessible to the public, and in classrooms.
- It is the responsibility of concealed-carry license holders to carry their handguns on or about their person at all times while on campus. Open carry is NOT permitted, meaning that a license holder may not carry a partially or wholly visible handgun on campus premises or on any university driveway, street, sidewalk or walkway, parking lot, parking garage, or other parking area.
- Per my right, I prohibit carrying of handguns in my personal office. Note that this
 information will also be conveyed to all students verbally during the first week of class.
 This written notice is intended to reinforce the verbal notification, and is not a "legally
 effective" means of notification in its own right.

STUDENT EMERGENCY SERVICES

UT's Student Emergency Services (http://deanofstudents.utexas.edu/emergency/) provides assistance, intervention, and referrals to support students navigating challenging or unexpected issues that impact their well-being and academic success. If you need to be absent from class due to a family emergency, medical or mental health concern, or academic difficulty due to crisis or an emergency situation, please register with Student Emergency Services. SES will verify your situation and notify your professors.

Emergency Evacuation Procedures

The following recommendations regarding emergency evacuation from the Office of

Campus Safety and Security, 512-471-5767, http://www.utexas.edu/safety/

Coping with stress and personal hardships

The <u>Counseling and Mental Health Center</u> offers a variety of services for students, including both individual counselling and <u>groups and classes</u>, to provide support and assistance for anyone coping with difficult issues in their personal lives. As mentioned above, life brings unexpected surprises to all of us. If you are facing any personal difficulties in coping with challenges facing you, definitely consider the various services offered and do not be shy to take advantage of them if they might help. These services exist to be used.

Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, unprofessional or inappropriate conduct of a sexual nature, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When unprofessional or inappropriate conduct of a sexual nature occurs in our community, the university can:

- 1. Intervene to prevent harmful behavior from continuing or escalating.
- 2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
- 3. Investigate and discipline violations of the university's relevant policies.

Faculty members and certain staff members are considered "Responsible Employees" or "Mandatory Reporters," which means that they are required to report violations of Title IX to the Title IX Coordinator. I am a Responsible Employee and must report any Title IX-related incidents that are disclosed in writing, discussion, or one-on-one. Before talking with me or with any faculty or staff member about a Title IX-related incident, be sure to ask whether they are a responsible employee. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email advocate@austin.utexas.edu. For more information about reporting options and resources, visit http://www.titleix.utexas.edu/, contact the Title IX Office via email at titleix@austin.utexas.edu/, or call 512-471-0419.

LAND ACKNOWLEDGMENT

We would like to acknowledge that we are meeting on Indigenous land. Moreover, (I) We would like to acknowledge and pay our respects to the Carrizo & Comecrudo, Coahuiltecan, Caddo, Tonkawa, Comanche, Lipan Apache, Alabama-Coushatta, Kickapoo, Tigua Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas, here on Turtle Island.

INF385C: Human-Computer Interaction - Instructor: Dr. Jacek Gwizdka

Course Schedule (subject to *change*)

Fall 2024 - Weds. 12:00 PM - 03:00 PM

#	Date	Topic	Reading Assignment (unless marked otherwise, readings are <i>before</i> class)	In class activity	Assignments (due at beginning of the class, unless indicated otherwise)
1	Aug 28	Introductions. What is HCI/UX? UX lifecycle.	UX:1,2,4. DN13:1 for the next week	Introductions	HCI Background Qs (not graded, due Fri)
2	Sept 4	Perception	JJ20: Intro, 1-5	P: discuss project teams	
3	Sept 11	Cognition, Design principles	JJ20:7-9; DN13:2, 4;	1xDC; 1xAP	PO. Teams
4	Sept 18	Usage research, data elicitation & analysis	UX:7,8	1xDC; 1xAP; 1xYUX; D	A1: Design Evaluation P1. Topics
5	Sept 25	Models to inform design, design requirements	UX:9,10	1xDC; 1xAP; 1xYUX; D	
6	Oct 2	Design, ideation	UX:12,13,14	1xDC; 1xAP; 1xYUX; D	P2. Usage research
7	Oct 9	Conceptual design, interaction design	UX:15,16,17,18; DN13:3-4	1xDC; 1xAP; 1xYUX; D	
8	Oct 16	Prototyping; Guest Presentation	UX:20	1xDC; 1xAP; 1xYUX; D	P3. Requirements & modeling
9	Oct 23	Empirical Evaluation	UX:22,23,24	1xDC; 1xAP; 1xYUX; D	
10	Oct 30	Analytic Evaluation, data analysis	UX:25,26	1xDC; 1xAP; 1xYUX; D	P4. Design
11	Nov 6	Affordances; HCI "laws"; Human Error	UX:30; JJ20:13; DN13:5	1xDC; 1xAP; 1xYUX	
12	Nov 13	Interaction Cycle	UX:31	D; P: informal presentations	P5. Prototypes + Pilot Test
13	Nov 21	No classes		Thanksgiving Holiday	
14	Nov 28	UX design guidelines	UX:32	1xDC; 1xAP; 1xYUX; D	P6. Evaluation
15	Dec 4	Project presentations		Poster presentations	P7. Presentations, P8 Final Report and A2: Reflections (deadlines on Canvas)

Readings from the textbook **UX**: Hartson & Pyla, (2019). *The UX Book, 2nded* are marked **UX**; Other readings are marked as: **JJ20**: Jeff Johnson, (2020). Designing with the Mind in Mind. 3rd Ed.

DN13 are from Norman, D. (2013). The Design of Everyday Things. Revised and Expanded Edition. Basic Books.

DC – Design Critique | AP – Article presentation | YUX - Your UX Story | D - Discussion | A – Individual assignment | P - Project-related

Intro Theory Applied topics Project presentations

^{*} Dr. Gwizdka away at an academic meeting or conference

INF385C: HCI

Assignment 1 – Design Analysis

Instructor: Dr. Jacek Gwizdka

This is the first at-home assignment. This is an individual homework to make you think about and analyze devices or software that we use in everyday life. Think about designs that you know about (non-computer designs are Ok) that you think are either very good or pretty bad. Select one product or system to discuss with respect to design and the user experience—for example, your remote control, your PDA, an iPod, an iPad, etc. (but NOT a phone) or any commonly used software (e.g. Microsoft Word, Photoshop, etc.) or any regularly accessed site (e.g. UT library page, ebay.com, etc.).

At this point in the course you are **not** expected to refer to HCl concepts, principles, or guidelines the system uses or breaks. This is more of an intuitive evaluation. Start by describing the product or system and its design. Say what you like or dislike about the design; why it is good or not so good. Just describe in your own words why you think the system you choose is good or bad and give examples.

Please compare and contrast it with another product (similar or not), perhaps one that does not give a good user experience. The main focus of the discussion should be about design. Include an analysis with respect to each of the components of user experience: usability, usefulness, and emotional impact. You can also include other factors, as appropriate, including, marketing and business aspects, and implementability or manufacturing issues.

Include images of both products/apps.

We are **not** concerned primarily about the functionality of the system, except as it might affect usefulness, as part of the user experience. We are mostly concerned with the interaction design, the user interface, and the overall user experience. For example there might be systems that have the capability to do a lot of things (high usefulness) but be very hard to use by the users for which the system was intended or designed (low usability and probably poor quality user experience).

This homework assignment is intended to be a small exercise, short and not time or effort intensive. If this is taking you a long time, you are probably doing too much.

Deliverables

You decide how to write it up. We expect not more than 1000 words. Your document should be single spaced.

INF385C: HCI

Assignment 2 – Reflections and Lessons Learned from the Project

Instructor: Dr. Jacek Gwizdka

Now that you have completed the project, please reflect on all parts of the process. What worked well and what did not work too well. Think about the reasons why. What would you change in the process (not in the design) next time? What are your lessons-learned from the overall experience? Your reflections can include comments on what worked well and not-so-well in team work.

Deliverables

A 2-4 page document. Single-spaced.

In Class: Article Presentation on AI in HCI (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides are due 24 hours before the class. Please see the sign-up Page on Canvas for the list of student names and dates.

During most weeks one or two students will be asked to present an online article on a topic related to the use of AI (in particular, the generative language and images models) in HCI, user experience design or usability. It would be advisable if an article is related to the weekly class topic, but given the novelty of this area it is not mandatory. You should be familiar with the weekly readings to select and present a related article. The article could be selected as an example of how a UX technique or tool can be improved/replaced by employing a generative AI tool; or even about when and how users can be replaced by employing AI tools.

If more than one students is presenting, you should coordinate their article selection so that there is no overlap. If in doubt, please consult your article's topic with the course instructor.

Sources of articles and papers include academic and professional conferences, such as papers from an academic conference (e.g., ACM CHI conference proceedings (Links to an external site) or from a professional magazine (e.g., UXPA: User Experience Magazine), professional blogs or portals, for example UIE articlesLinks to an external site., Norman/Nielsen group articlesLinks to an external site., Bruce Tognazzini's AskTogLinks to an external site.

More links are posted on Canvas wiki page.

You are required to upload your presentation to Canvas. During class meeting, you will do a short presentation of the selected article (7-10 min + Q&A). Time limit will be enforced.

Design Critique in Class (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides are due 24 hours before the class. Please see the sign-up Page on Canvas for the list of student names and dates.

Most weeks one or two students will be asked to present a **short design critique** of a human-machine interface (you should be able to show an image of the interface or device). Your critique should contain the following elements:

- Selection of a computer/device interface as an example of a good or bad design. Due to a limited time for your presentation it is a good idea to you focus either on the good or on the bad side of this interface. Include a visual of the presented interface (an image, video etc.).
- Support your critique use design guidelines/principles, heuristics, Gestalt principles, etc. The idea is to analyze the design from different perspectives as you learn about them in this course. It is understood that in initial design critiques you will need to rely more on your "design intuition" rather than on design principles. Later in the semester, you will be able to use more design principles, guidelines, etc.
- Short discussion of the design tradeoffs, alternative solutions, etc.;
- Suggestions for improvements (if you can think of some).
- Prepare slides to present your critique and submit to Canvas
- Note: Each of you should critique a different interface / device. And you should not repeat the critique you submitted in your homework.

You are required to upload your presentation to Canvas. During class meeting, you will do a short presentation of the selected article (5-7 min + Q&A). Time limit will be enforced.

Discussion Leading in Class (ongoing)

Instructor: Dr. Jacek Gwizdka

During most weeks (please consult Canvas for specific weeks) one or two students will be assigned to lead discussion on the topics of weekly readings based on online discussion on Canvas. That is, the focus is not just on summarizing the readings, but on questions and answers in your online discussion. Selected highlights and, occasionally, additional content, related to the readings will be provided by your instructor.

The discussants are required to come prepared to take a leading role in-class discussion. The discussants should be familiar with related questions/answers posted by classmates on Canvas and be able to group them into related topics according to the content of weekly readings. You can also try to answer questions which received no replies.

Discussion leading should be supported by slides (submitted to Canvas ahead of the class time, as described on Canvas).

Your UX Story (ongoing)

Instructor: Dr. Jacek Gwizdka

Presentation slides or other visual are due 24 hours before the class. Please see the sign-up Page on Canvas for the list of student names and dates.

Most weeks one student will be asked to share a short "UX story". That is, you will be asked to tell a short story from your UX experience. Examples include, sharing with the class about a UX problem you solved and how you did it, about something unexpected you learned from users, about a UX technique you learned that is not covered in this course.

During class meeting, you will present your story in the class (5-7 min + Q&A). Support you story with slides or some other visuals. Time limit will be enforced.

You are required to upload your presentation to Canvas.

Online Reading Discussions (ongoing)

Instructor: Dr. Jacek Gwizdka

You are responsible for keeping up with readings in the book per the schedule given in the course schedule/calendar. All assigned readings are to be done before a class meeting (except our first meeting, of course).

You are required to post at least one discussion question relevant to the assigned weekly reading on the designated Canvas discussion area (please note there may be more than one topic per week) and respond to at least one question posted by another student. Your questions should be in depth and sufficiently detailed to demonstrate that you read the assigned material (and not just skimmed it). Questions should not be too short (e.g., <10 words) or too long (e.g., > 200 words; these numbers are just rough guidelines). Questions can be on any topics from the reading and are not meant to summarize the reading. They should show you in depth reading and should not be superficial. Any student, course assistant or an instructor may post responses to online questions. Be prepared to discuss your questions during class meeting.

If you cannot come up with a question, please post a couple of main points you learned from the reading. This could include what surprised you or what you don't agree with (add why).

The **deadline** for posting questions is Sunday evening 10pm, which is 62 hours before the class meeting time. Responses should be posted by Wednesday noon.