

Understanding Human-Centered AI

Course number: I320U (Unique ID: 27525)

Semester: Fall 2024

Time: 9:30-11 am CT Mondays and Wednesdays

Location: ETC 2.132

Office hours: 1-2 pm CT Tuesdays (<https://utexas.zoom.us/j/94138664626>). It can also be scheduled upon request.

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Course Description

Artificial intelligence (AI) advances have changed how decisions are made in organizations, governments, and everyday life. This course will introduce principles and methods to design human-centered AI. Students will learn emerging findings on AI's psychological and societal impacts and practice applying methods for conceptualizing innovative AI products and designing user experiences.

Note: This course is about human-centric theories and methods for envisioning AI systems. It will provide no technical insight into machine learning, data mining, or statistical pattern recognition.

Learning Outcomes

- Be aware of emerging AI applications in society
- Understand the impacts of AI applications on people, organizations, and society.
- Apply principles and methods for designing human-centered AI
- Practice reflecting critically on the use of AI in society, identifying problems, and having a constructive stance

Prerequisite for the Course

Informatics 310U: Introduction to UX Design

How Will You Learn?

Statement of Learning Success

Your success in this class is important to me. We all learn differently, and everyone struggles sometimes. You are not, ever, the only one having difficulty. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible.

Together we will develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT.

Counseling and Mental Health Center (CMHC)

Students who are struggling for any reason and believe that it might impact their performance in the course are urged to reach out to Bryce Moffett (iSchool CARE counselor) if they feel comfortable. This will allow her to provide any resources or accommodations that she 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 512-232-4449. Bryce's office is located in FAC18S and she holds drop-in Office Hours on Wednesday from 2-3pm. For urgent mental health concerns, please contact the CMHC 24/7 Crisis Line at 512-471-2255.

Teaching Modality Information

The main learning in this class happens through active discussion and in-class activities as well as homework and projects. Thus, attending the class is critical. The course will not be recorded, and there will be no alternative to synchronous attendance other than normal emergency accommodations.

Communication

The course Canvas site can be found at utexas.instructure.com. Please email me directly or through Canvas. You are responsible for ensuring that the primary email address you have recorded with the university is the one you will check for course communications because that is the email address that Canvas uses.

Asking for Help

You can ask the TA or me questions and arrange individual meetings with us via Canvas.

Disability and Access

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 website for 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.

University Policies and Resources

For a list of important university policies and helpful resources that you may need as you engage with and navigate your courses and the university, see the [University Policies and Resources Students Canvas](#) page. The page includes the language of the University Honor Code, Title IX legal requirements for Texas employees, and information about how to receive support through the office of Disability & Access.

Course Requirements and Grading

Required Materials

All course materials will be available via the course Canvas site.

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 my explicit, my written permission. Unauthorized sharing of materials may facilitate cheating. The University is aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in initiation of the student conduct process and include charge(s) for academic misconduct, potentially resulting in sanctions, including a grade impact.

Required Devices

You must bring your laptop to the class to complete in-class activities during the class. Access to a computer is needed to complete the homework and project.

Classroom Expectations

- Class attendance & participation: The main learning in this class happens through active discussion and in-class activities as well as projects. Thus, attending the class 9:30-11:00 am CT Mondays and Wednesdays is critical. The course will not be recorded, and there will be no alternative to synchronous attendance other than normal emergency accommodations.
- Behavior expectation: Please make sure to be engaged and respectful and to contribute to discussions. The behaviors described in [Section 11-400 of the Institutional Rules](#) are prohibited.

Assignments

1. **Attendance & Active Participation.** Students are expected to attend every class. Every student should demonstrate ongoing engagement in class, including lectures and discussions. Attendance takes 10%, and active participation takes 5% of the overall grade. Absences will result in losing both attendance and participation points.

Attendance

- **Coming to the class more than 7 minutes later the start time (i.e., 9:37 am CT) will be considered late, and 20% of the points will be deducted. Coming to the class after 10:00 am CT or leaving the class early without the instructor's approval will be considered absent and will get zero points.**
- Absences will only be excused in situations following university policy (illness, religious holy days, participation in University activities at the request of university authorities, and

compelling absences beyond your control) with proper documentation and timely notification (prior to class for non-emergencies).

Active participation

- Activities that hurt the learning experience (for both self and others), including but not limited to watching videos, playing games, browsing social media, and taking naps, will result in the deduction of the participation point.
- You must submit and/or ask questions for guest speakers in advance or during the guest lecture.

2. In-class activities. Some weeks will involve in-class activities. In-class activities include discussion activities as well as worksheet activities prepared by the instructor and the TA. These activities will be expected to be finished in class and submitted by 11 am CT.

3. Individual homework. Individual homework will be assigned. All homework will be given one week to complete and need to be submitted by 11:59 pm CT Wednesdays.

4. Group project. You will work on a group project for the last month of the class. Detailed guidelines are documented in the Project Guidelines document.

5. Teamwork peer evaluation. We will conduct a teamwork peer evaluation survey at the final for your group project. In the survey, you will be asked to evaluate your teammates, including yourself, and your collaboration experiences. The survey results will be factored into the group project grade, which may result in different team project grades for different students. For example, if a student has not contributed to the team project consistently, the student will get a lower team project grade than their teammates.

Assignments	Percent of Total Grade
1. Attendance & active participation	15%
2. In-class activities	15%
3. Individual homework	35%
4 & 5. Group project & peer evaluation	35%

Late Work and Extensions: “Extra Hours”

We will use a limited extension method on our assignment deadlines, which we call **Extra Hours**. This is to provide you with some flexibility for times of heavy workload, minor illness, job interviews, conference travels, and other exceptional yet often predictable circumstances.

- You will have a total of **120 Extra Hours** for the entire semester

- Applicable to: Individual homework, in-class activities, and group projects
- Not applicable to: Final group project presentations

Usage Guidelines:

- Extra Hours are deducted in 1-hour increments
 - Ex: If you upload your assignment 122 minutes late, it will use up 3 Extra Hours
- Maximum 36 Extra Hours (1.5 days) per assignment
 - **Assignments over 36 hours late will not be accepted**
- For group assignments, hours are deducted from ALL members

What To Do:

1. Submit your assignment
2. Email the TA within 1 hour of submission
 - Subject line: "I320U - Extra Hours"
 - Include: Assignment name, how many hours used for the assignment, and the remaining balance of hours
3. Please remember to email the TA promptly within one hour of your submission. Not sending the email may result in the assignment point deduction.

Extra Hours are not to support procrastination. Late submissions should only occur in exceptional circumstances. If you use up your Extra Hours and seek further extensions, you will first need to provide acceptable justifications for all Extra Hours that you used. Late submission after you use up the Extra Hours or late submission of the presentations will have points deducted.

Absences

Absences will result in a reduction of attendance and active participation grade. Absences will only be excused in situations following university policy (illness, religious holy days, participation in University activities at the request of university authorities, and compelling absences beyond your control) with proper documentation and timely notification (prior to class for non-emergencies).

Artificial Intelligence

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) in this class is permitted for students who wish to use them, **provided the content generated by AI is properly cited**. If you are considering the use of AI writing tools but are unsure if you are allowed or the extent to which they may be utilized appropriately, please ask.

+/- Grading Policy and Grade Breaks

+/- grades will be used for the final class grade.

Grade	Cutoff
A	94%
A-	90%
B+	87%
B	84%
B-	80%
C+	77%
C	74%
C-	70%
D+	67%
D	64%
D-	60%
F	<60%

For detailed information about what grade is required for you to receive credit for this class, please refer to UT’s Catalog.

Academic Integrity Expectations

Students who violate University rules on academic misconduct are subject to the student conduct process. A student found responsible for academic misconduct may be assigned both a status sanction and a grade impact for the course. The grade impact could range from a zero on the assignment in question up to a failing grade in the course. A status sanction can include a written warning, probation, deferred suspension or dismissal from the University. To learn more about academic integrity standards, tips for avoiding a potential academic misconduct violation, and the overall conduct process, please visit the Student Conduct and Academic Integrity website at: <http://deanofstudents.utexas.edu/conduct>.

Course Outline

The table below lists class topics. The detailed, up-to-date course outline with the instructions, assignments, their due dates, and other essential information is posted on canvas. You must check Canvas regularly.

Changes to the schedule may be made at my discretion if circumstances require. I will announce any such changes in class and will also communicate them via a Canvas announcement. It is your responsibility to note these changes when announced, and I will do my best to ensure that you are notified of changes with as much advance notice as possible.

Week	Date	Day	Class Topic
1	8/26	M	Introduction
	8/28	W	What AI is

2	9/2	M	Labor Day Holiday (No Class)
	9/4	W	Generative AI: Emerging applications
3	9/9	M	Generative AI: Art
	9/11	W	Human experiences with AI
4	9/16	M	Design methods for designing right AI
	9/18	W	Matchmaking with AI
5	9/23	M	Human-AI Interaction guidelines
	9/25	W	Designing human-centered AI at IBM & guidelines for generative AI
6	9/30	M	Designing AI explanation: AI-DEC Overview
	10/2	W	AI-DEC Workshop
7	10/7	M	Interacting with agents
	10/9	W	Chatbot design software tutorial
8	10/14	M	Midterm: AI concept presentations
	10/16	W	AI fairness & evaluation
9	10/21	M	Leveraging AI for computing accessibility at Google
	10/23	W	Designing with stakeholders
10	10/28	M	Industry panel - TBD
	10/30	W	Project proposal check-in
11	11/4	M	Contextualizing data for AI: Overview
	11/6	W	Contextualizing data for AI: Workshop
12	11/11	M	Group project work session
	11/13	W	Group project work session
13	11/18	M	Group project work session
	11/20	W	Group project work session
14	11/25	M	Fall Break / Thanksgiving
	11/27	W	Fall Break / Thanksgiving

15	12/2	M	Final presentation
	12/4	W	Final presentation
16	12/9	M	Final reflection & submission

Land Acknowledgment

I would like to acknowledge that we are meeting on the Indigenous lands of Turtle Island, the ancestral name for what now is called North America. Moreover, I would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Tonkawa and Ysleta Del Sur 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.