

I ILLINOIS

DTX 225

Intro to Ethics in HCD

Course Information

- Duration: 8 weeks
- Format: Asynchronous Online
- Credit Hours: 2 Credit Hours

Course Description

An exploration of questions at the intersection of ethics and human centered technology design. We will be focusing on the “empathize” component within human centered learning principles, to best serve others in designing products that serve others. As well as observing subjects through an empathetic and ethical lens, such as; data, environmental stability, artificial intelligence, apps and social media, content truth/validity, physical and mental health, and equity/inclusion. How do we design a humane world?

Learning Outcomes

In this course, students will:

- Demonstrate how to design ethically within the technological space
- Observe products and recognize unethical patterns and/or principles
- Describe the model of ethics and apply it to various topics in technology
- Identify areas of technology where human centered design would be beneficial
- Develop and describe a framework in which to incorporate ethical design in relation to a technological area

General Education

None

Prerequisites

None

Course Materials

Learning Management System (LMS)

Canvas: <https://canvas.illinois.edu>

- All readings, assignments, discussion boards, and announcements will be posted here

Course Readings

Recommended Books

- The Alignment Problem: Machine Learning and Human Values
- The Ethics of Technology: A Geometric Analysis of Five Moral Principles

Shows/Videos

- Netflix Documentary: The Social Dilem

Equipment

Laptop for design activities and digital collaboration

Course Requirements and Policies

Grading Breakdown

| Instructional Activity | Points |
|---|-------------------|
| 6 Multiple Choice Quizzes (5 points each) | 30 points |
| 6 Discussion Posts (Original Post: 3 points, Two Responses: 2 points) | 30 points |
| 6 Weekly Assignment (5 points each) | 30 points |
| Final Project/Paper | 50 points |
| Total | 140 points |

Grading Criteria

[[[[[Include any additional grading criteria and/or assignment-specific grading criteria (i.e., rubrics) and where this may be located. This may also include information about instructor feedback, turnaround time, and grade inquiries. (e.g., [Assignment #1] [Assignment Rubric and link where it may be found]. *May be a separate section or combined with the course components section below.*]]]]]

Course Components

[[[[[Include a description of all major course components (i.e., assignments, discussions, quizzes, exams, extra credit). It is helpful to provide information here on how and where assignments should be submitted or where they may locate additional information. *If applicable*, indicate course components only required for certain sections (i.e., undergraduate/graduate). *Grading Breakdown & Assignments and/or Grading Criteria may be combined.*]]]]]

Weekly Topics and Due Dates:

All Deadlines are due at 11:59 pm every Thursday, Saturday & Sunday

- **Every Monday:** Weekly module goes live
- **Monday - Thursday:** Complete the module on canvas (Do the readings & videos)
- **Every Thursday:** Deadline for taking the Quiz
- **Saturday:** Deadline to respond to the Discussion prompt
- **Sunday:** Respond to two of your classmate's discussion posts + Submit the Assignment

Final Project

Pick an app/experience that applies to the topics we covered over this course. Critically look at an app and recognize unethical patterns and/or principles. This could be an application that uses black patterns, or doesn't properly respect users data, etc. Be creative and find issues you might find if you worked f company that was trying to improve the product . You will then write an assessment around your chosen product to improve it ethically. You can discuss the problem and how you might go about fixing it, or y can show sketches and designs. Here, we will use human centered design methodology to learn how to improve existing products that push the bounds of ethics, or completely cross the line.

Example: Instagram uses infinite scroll. This can be seen as unethical, because it keeps the user engag in the product, and can potentially make them lose track of time and become addicted, due to continually receiving/seeing information. When you refresh the feed, it's similar to that of a slot machine and was designed that way to be

more addictive and enjoyable. Here we would talk about how to re-design the tool and how we improve the experience so that the product is no longer addictive. Perhaps show alternative solutions to solve these problems.

Requirements: This project will require a 4-5 page paper, double spaced. You will need to show screen shots and follow MLA guidelines: [MLA Guidelines](#).

Project/Paper Grading Rubric

| | Exceptional (A+) | Good (A-B) | Poor (C-D) |
|---------------------------------|--|--|--|
| Include an application in paper | | | <i>Doesn't mention an application</i> |
| Discuss ethical issues | <i>Discuss 5-6 examples of unethical practices</i> | <i>Discuss 3-4 examples of unethical practices</i> | <i>Discuss 1-2 examples of unethical practices</i> |
| Length of paper | <i>5-6 pages</i> | <i>4-5 pages</i> | <i>1-3 pages</i> |
| Grammar | <i>No grammar issues</i> | <i>Little to no grammar issues</i> | <i>Multiple grammar issues</i> |

Late Assignment Policy

Points for any type of submissions that are turned in late drops by half. If one week has passed, no points are available for submission. The only exceptions for this are illness requiring hospitalization, death in the family, and/or notification from the emergency department.

Class Attendance

N/A?

Absence Policy

N/A?

Grading Scale

| [[[[[Percentage/Points]]]]] | Letter Grade |
|-----------------------------|--------------|
| 97 - 100.00 | A+ |
| 93-96.9 | A |
| 90-92.9 | A- |
| 87-89.9 | B+ |
| 83-86.9 | B |
| 80-82.9 | B- |
| 77-79.9 | C+ |
| 73-76.9 | C |
| 70-72.9 | C- |
| 67-69.9 | D+ |
| 63-66.9 | D |
| 60-62.9 | D- |
| 0-59.9 | F |

Course Schedule/Outline

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| Week | Topic | Quiz | Discussion | Due Date | Paper |
|--------|--|--------------------------------------|---|--------------------------------|-------|
| Week 1 | Intro to Ethics and Technology | Quiz 1 Due: Thu. Jan 18 | Discussion Due: Sat - Jan 20 Responses Due: Sun - Jan 21 | Due: Sun - Jan 21 | |
| Week 2 | Data (Data usage & data inequality) | Quiz 2 Due: Thu. Jan 25 | Discussion Due: Sat - Jan 27 Responses Due: Sun - Jan 28 | Due: Sun - Jan 28 | |
| Week 3 | AI (Algorithm Bias/Trustworthy AI) | Quiz 3 Due: Thu. Feb 1 | Discussion Due: Sat - Feb 3 Responses Due: Sun - Feb 4 | Due: Sun - Feb 4 | |
| Week 4 | Content Truth (Misinformation/ Deepfakes) | Quiz 4 Due: Thu. Feb 8 | Discussion Due: Sat - Feb 10 Response Due: Sun - Feb 11 Paper Check In Due: Sun | Due: Sun - Feb 11 | |
| Week 5 | Physical and Mental Health | Quiz 5 Due: Thu. Feb 15 | Discussion Due: Sat - Feb 17 Response Due: Sun - Feb 18 | Due: Sun - Feb 18 | |

| Week | Topic | Quiz | Discussion | Due Date | Paper |
|--------|------------------------------|--------------------------------------|--|--------------------------------|--------------------|
| Week 6 | Equity/ Inclusion | Quiz 6 Due: Thu. Feb 22 | Discussion Due: Sat - Feb 24 Response Due: Sun - Feb 25 | Due: Sun - Feb 25 | |
| Week 7 | Draft of Final Paper | | | | Due: Mar 3 |
| Week 8 | Final Paper | | | | Due: Mar 10 |