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COURSE DESCRIPTION

"Never limit yourself because of others limited imagination, never limit others because of your limited imagination" -- Barack Obama

Introduction to value-sensitive design (VSD), information system design that accounts for human values in a principled and comprehensive manner. Examination of existing systems from a VSD perspective. Explores VSD research methods including conceptual, technical, empirical investigations. Key values include accountability, autonomy, consent, privacy, property, trust, sustainability (5 credit hours).

Value sensitive design, pioneered by Prof. Batya Friedman, Professor, University of Washington Information School, refers to an approach for designing information technology. This approach seeks to provide theory and method for accounting for human values in a principled and comprehensive manner throughout the design process. Value sensitive design is primarily concerned with values that center on human wellbeing, human dignity, justice, welfare, and human rights. Specific values include trust, accountability, freedom from bias, access, autonomy, privacy, informed consent, and freedom of expression.

This class is an introduction to the theory and method of value sensitive design. We shall explore how values might or might not come to be embedded in information systems; the human-tool interactional stance; direct and indirect stakeholders; designer values, explicitly supported values, and stakeholder values; and the co-evolution of technology and social structure. Most of all we shall discuss a variety of different values and explore how values held by individuals, groups, and societies can be addressed during design.

Along with this introduction to the theory of value sensitive design, we shall develop practical skills for a range of methods including:

- Direct and Indirect Stakeholder Analysis
- Value Scenario
- Value Sketch
- Value-Oriented Semi-structured Interview

- Model of Informed Consent
- Value-Oriented Mock-up
- Value Dams and Flows
- Futures Workshop
- Value Sensitive Action-Reflection Model
- Envisioning Cards

Value sensitive design can be used with other methodologies and methods in information system design and we shall explore some points of intersection, specifically with usability engineering, scenario-based design, and participatory design.

Ultimately, value sensitive design requires that we broaden the goals and criteria for judging the quality of information systems to include those that advance human values. During the course, you will apply value sensitive design to three Design Mini Projects. The projects and class activities will equip you with a distinct and compelling perspective for information systems design.

See: **www.vsdesign.org (http://www.vsdesign.org/)**

REQUIRED COURSE MATERIALS

Readings

Find all readings on the **Course Schedule** page.

Your Prototyping Kit

We will spend a good deal of time sketching, outlining, and making low fidelity prototypes with paper. You should prepare a prototyping kit, consisting of:

- Scissors
- Glue-stick
- White unlined paper
- Colored construction paper
- Pencil and eraser
- Colored markers
- A pack of sticky notes
- Other craft materials of your choice

As you gain experience in design, you might cultivate your kit to include tools and materials that are special to you, that are distinctive, and that help you express your identity as a designer.

Please bring your prototyping kit to all studio sessions on Thursdays.

Envisioning Cards

The *Envisioning Cards* are a versatile toolkit for attending to human values during design processes. The cards are a relatively new tool originating from the Value Sensitive Design Research Laboratory (Friedman & Hendry, 2011). The cards are a leading-edge design method.

You will find them to be useful throughout your studies at the UW Information School. And, with practice, you'll find them to provide a unique perspective on information systems. They will help you be critical and generative. The cards will be especially useful for the design project.

See: **www.envisioningcards.com (http://www.envisioningcards.com/)**

Please purchase the *Envisioning Cards*, available at the UW Bookstore. Bring the cards to all studio sessions:

Friedman, B., Nathan, L. P., Kane, S., and Lin, J. *Envisioning Cards*. University of Washington, Seattle, WA, USA, 2011.

COURSE FORMAT

Each week will generally follow the same pattern. This weekly pattern will allow us to both develop a *conceptual appreciation* for value sensitive design methods as well as *practice skills* for using those methods in interaction and system design. Throughout the quarter, we shall strike a balance between conceptual learning that you can build upon throughout your career and practical skills that you can use immediately.

Lectures. On Tuesdays, we will begin with a lecture on the key concepts of the week and move to a class discussion of the readings. We will aim to thoroughly understand the authors' views and to critically examine how they can be applied to address human values in the design of information systems.

Studios. On Thursdays, we will pursue a design activity where we will analyze a problem and work toward a solution using a method. We will aim to develop practical skills. The class will end with a reflective discussion.

Weekly handouts will guide you through the readings. The readings will be available at the course website. You should read each assigned paper carefully for an in-depth understanding of the authors' views. During class, we will critically discuss the papers and examine their implications for the value sensitive design of interactive systems.

ASSIGNMENTS

The class grade will comprise the following components. This is a graded course (decimal grades) for both undergraduates and graduate students.

The following activities strike a balance between theory and practice as well as between individual and group work.

Design Practice (60%)

- Design Activities (30%)
- Mini Project (30%)

Design Theory (20%)

- Writing Assignments (20%)

Reflective Practice and Class Participation (20%)

- Optional written statement

Design Activities and Mini Project. The design activities are worth 30% of your grade and the mini project is worth 30%. This work will give you an opportunity to develop your skills for design.

For more on the project, read the **project brief**.

Writing Assignments. The writing assignments will prompt you to study the readings carefully, to develop an understanding for the authors' views, and to take a position on them. The writing assignments will support lectures and class discussion, generally as follows:

1. Your writing is due by 5pm on Mondays
2. On Tuesdays you will spend 20-30 minutes discussing your writing in small groups
3. A member of each group will present on the topics discussed
4. The instructor or teaching assistant will take up the topics and discuss them in terms of the readings
5. Your writing will be graded and returned by the following Tuesday.

More more, read: **writing assignments.**

Important note: Please note participation is worth 20% of the overall grade - it is crucial for you to be at class, to discuss the readings, to present your ideas and conclusions, and to ask questions.

Reflective Practice and Class Participation. INFO 464 should be challenging, interesting, and fun. Most of all you should develop your skills in reflective practice - that is, taking action, noticing the consequences, and thinking about what you have learned and might repeat or do differently the next time.

In short: Engage, participate, and strive to make the class more stimulating, more useful, and more fulfilling for all of us. We can create a supportive and rewarding learning environment. Do these and other similar things:

1. *Treat all with respect*. Please be constructive in all discussions.
2. *Struggle*. Seek to understand. Seek truth. Ask for help.
3. *Come to class prepared*. Please read carefully and be ready for discussion.
4. *Talk and engage.* Engage with the readings by expressing your views. If you generally talk a lot in classes challenge yourself to say less. If you generally don't talk much, challenge yourself to talk more.
5. *Be an active listener*. Please be attentive, be engaged, use in-class technology with discretion. Listen first, then respond. Use our meetings to learn to listen better.

6. *Help each other be successful*. Please, for example, build on or challenge what others have said, given room for others to give their views, direct your comments to everyone in the class, not just the instructor. We all have a responsibility to help each other grow and succeed.

Consider these very specific actions:

- Speak more – or less! – than usual
- Practice thinking fast on your feet
- Give openings to others
- Challenge or build upon others
- Focus on listening
- Use your body to communicate
- Show vulnerability by, for example, asking about topics that you do not understand but think you should
- Direct comments or questions to others
- If someone – instructor and teaching assistant included – says something hurtful, hateful, or inappropriate let them know directly (and let the instructor or teaching assistant know)
- Contribute new readings from the popular press or from the research literature
- Make an appreciation for someone else's questions, design ideas, or comments

Optional. You may write an optional 2 or 3 paragraph personal statement on your contributions to the class. Your reflection could summarize how you have sought to improve the learning environment, your personal goals for participating, how your engagement contributed to our learning, and so on. You might focus on lessons learned and things that you will try in subsequent classes, difficulties you encountered in your learning and how you addressed them, your personal mission statement for the class, and so forth.

Submitting your participation statement is optional.

Find complete assignment details and due dates on the **Assignments** page.

GRADING

This course uses the **iSchool Standard Grading Scheme**, which converts percentage grades into 4.0 grades.

The instructor and teaching assistant frequently use a system of check-marks as follows (in general, you will be asked to re-do work that is a ✔- or a ✔--).

✔++ 4.0 (100%)

✔+ 3.6 (92.6%)

✔ 3.3 (89.1%)

✔- 2.8 (85.6%)

✔-- 2.0 (82.1%)

Late Policy

The instructor will generally grade late work because life happens and professional goals and duties outside of class sometimes arise. If you are unable to submit a deliverable by a due date please let the instructor know as soon as possible. The instructor will try to accommodate your needs.

Make-up Work

See late policy, above.

Re-grading Policy

To have work re-graded, please submit a Re-grade Request within five days of when your work was returned. The request must be a single page, sent by e-mail. It should contain the following information:

- Re-grade Request
- The information contained on the standard cover sheet
- An explanation for why you believe you deserve a higher grade.

The instructor will consider your request and, if warranted, will re-grade your work.

Group Work

Unless there are extenuating circumstances, when work is completed in groups of two or more all group member receive the same grade. Extenuating circumstances include but are not limited to:

1. A group member fails to adequately participate in a project
2. A group member creates severe conflict because of, for example, hateful speech, bulling, or similar
3. A group member plagiarizes.

Should your group encounter difficulties please let the teaching assistant or instructor know as soon as possible. The sooner we know, the sooner we might be able to help.

POLICIES AND PRACTICES

Identifying information

In general, to facilitate communication please include the following information on all submitted work.

- Your name and e-mail address
- Course name
- Quarter, program, department, and university
- Assignment name
- A date

- A website address (if relevant)

Responsive, interest-driven learning

As an instructor, my bias and interest is towards being responsive and driven by students' interests, since I believe that students are best served by being given opportunities to take control. Hence, I try to enable students to pursue their own personally meaningful tasks within the limits of the curriculum. My commitment is to be responsive to what students want to learn and want to do.

Specific approaches include:

1. I begin class with an agenda and our learning goals. Then, I often ask: "What would you like to discuss or practice today?" This question signals an opportunity to shape the class. My response will be to try to make connections between the planned topics or activities in the curriculum and your specific interests.
2. Some parts of the curriculum are left open - design activities, for example - such that I can fill those in with activities that emerge from our class discussions.
3. From time to time, I will add new references and links to the popular press in response to our discussions in class.
4. Within fairly flexible limits, you can do anything you want for the design project, so long as you use design method and theory to move your interests forward.
5. In various ways, I'll ask for your feedback - by the greetings exercise, by email, before or after class, at office hours - and respond accordingly.

Related to the instructor being responsive, I also ask that you take responsibility for making our class meetings work. Often the best classes occur when students drive the conversation forward collectively and the instructor listens carefully and says almost nothing. Some basic conversational moves for making this work:

1. You might say: "I don't understand X. I think it is about ..." and someone might respond: "Me too. I think X was about ... but I"m not sure." It is okay, indeed, expected that some things will very hard to understand.
2. When someone says X, you might ask "on which page does the writer say X? ... Oh, I see it now. Thank you."
3. When some says "on page 10 the writer says X," you might say "I saw that too - but I thought the writer meant Y" or "I saw that too - but I was confused because on page 4 the writer said Y"
4. When someone says X, you might join in and say "building on X, I would like to say ..." or "I disagree with X, I think a stronger approach is Y."
5. Person A might say "I have a question for Person B ..." or Person A might say "I have a question for the class."
6. When someone speaks softly you might say: "Speak up please," "more volume please."
7. And, of course, there are many, many other things we can do create a safe and brave environment.

To guide the class in desired directions, think about your mission statement, which might consist of brief answers to these questions:

1. What would you like to accomplish in this class?
2. Why do you want to accomplish it?
3. How are you going to accomplish it?

Our place

At University of Washington Commencement 2017-18, the University Marshall, our own Prof. **Joseph Janes (https://ischool.uw.edu/people/faculty/profile/jwj)** (now the Faculty senate vice chair), said the following: *"Welcome to our beautiful campus. We'd like to begin this ceremony by acknowledging the land on which the University rests, the land of the Coast Salish peoples, which touches the shared waters of all tribes and bands within the Suquamish, Tulalip and Muckleshoot nations. Today, we celebrate together."*

In this vein, to start our class, I would like us to acknowledge the land of the Coast Salish peoples.

Attendance

Students are expected to attend class regularly. Although attendance is not specifically graded, missing a significant number of classes will likely have a negative impact on your class participation grade, as you will have fewer opportunities to participate in discussion and in-class activities.

If you must miss a class, due to an illness or other extenuating circumstance, please let the instructor know in email or in person. As needed, the instructor will work with the student on suitable make-up arrangements.

Guidelines for Communicating by Email

When communicating with the instructor, please follow these guidelines:

- You are welcome to give feedback to the instructor about the course, to ask a question about an assignment, to share an interesting article or resource, to report that you will be absent from a class/lab/studio, to request additional time for an assignment (because of significant health, personal, or educational matter), or similar communication;
- Whenever appropriate, please copy the class listserv with your question or comment;
- If you can ask a quick question or make a quick comment just before class or just after class do that and avoid sending the email;
- E-mail concerning assignments might not be replied to if it is sent within 36hr of the assignment due date;
- If your e-mail concerns your grade, please follow the re-grading policy (see above);
- E-mail that is sent on Friday afternoon or over the weekend is usually read on Monday or Tuesday of the following week;
- If you don't receive a reply within 2 days or so, please resend your e-mail or ask about it during class or lab/studio.

Our Attention and Technology

A most valuable human resource is our *attention*. The instructor will make the case that at certain times we should put our devices aside so that we can focus on listening and speaking to each other. As a class, we will consider our commitments to where and how we allocate our attention.

Please don't shop during class. Please don't use social media. Please use technology well and with focus.

Data and Canvas

Canvas tracks us - instructors, teaching assistants, and students. Some questions that we might ask: What data is collected? How is it used? By whom? Where it is stored? When is it deleted? What happens if there is a data breach?

Some explanation on these and related questions, from UW-IT's Canvas service manager (January 9, 2018, email):

> Our relationship with Instructure and use of Canvas, and warranties for data privacy and security is governed by the contract, which an Internet2 Net+ contract with Instructure. In the event of any data breach, Instructure must notify affected customers, and follow through on remedies outlined in that document. This is an agreement that I believe over 80 Internet2 member institutions use to purchase Canvas services, and as such has been highly vetted to meet legal requirements and standards. I am not familiar with the exact process and remedies, however.
>
> The Canvas privacy policy is available online here **https://www.instructure.com/policies/privacy/ (https://www.instructure.com/policies/privacy/)** and it describes generally what kind of data is recorded when students and instructors use Canvas. As you can imagine, this includes course membership, student submissions, and also user activity, such as what links are clicked.
>
> The UW Canvas data retention policy is posted here: **https://itconnect.uw.edu/learn/tools/canvas/data-retention/ (https://itconnect.uw.edu/learn/tools/canvas/data-retention/)** . While the policy states a 5 year retention period, the UW has yet to delete any courses. We are currently chartering a project to develop processes for notification, and will begin deletion of courses later this year. It is a lot of work to adequately notify everyone.
>
> Canvas is software as a service operated in the Amazon cloud. That is where the data resides.

Emergency evacuation plan: Active shooter scenario

If we needed to, how would we get out of this classroom quickly and safely? Look around. Develop a plan for yourself. What exits are available? What will we do if we need to get out? In the very unlikely case that we encounter an emergency, my plan is to:

1. Remain calm – I will try not to freak out.
2. Be positive – I will look forward, knowing that I can succeed.
3. Be assertive – I will take the best steps I can, even if they may be risky steps.

Commitments

- If possible, we will move quickly. We will run.
- If running is not feasible, we will hide.
- If hiding fails, I will fight aggressively.

Drawing from these guidelines

- **http://police.uw.edu/aboutus/divisions/opst/crimeprevention/activeshooter/ (http://police.uw.edu/aboutus/divisions/opst/crimeprevention/activeshooter/)**

Right to Revise

The instructor reserves the right to revise this syllabus.

ACKNOWLEDGEMENT

This syllabus draws from previous value sensitive design classes taught by Prof. Friedman and other colleagues.

RESOURCES

Student Resources (https://docs.google.com/document/d/1ZpD3alAmXg33_6taM9LaFb4t0twW6glDLRVXlVS9tmk/preview)

A number of challenges from a variety of directions can affect your ability to bring your optimal attention and energy to a course. **Student Resources (https://docs.google.com/document/d/1ZpD3alAmXg33_6taM9LaFb4t0twW6glDLRVXlVS9tmk/preview)** is a set of links to campus resources that UW makes available to students in trying to mitigate and cope with some of these challenges.

iSchool Technology Requirements

The iSchool has a set of technology requirements for both online and residential students. We highly recommend that students adhere to these standards which are updated annually. Students who do not meet these standards may experience technology problems throughout the course.

iSchool Learning Technologies Support Site

Knowledge base for Canvas, VoiceThread, web conferencing systems, and other learning technologies tools.

UW Libraries (http://www.lib.washington.edu/)

In this course you may be required to access a large number of databases through the Internet. Several of these databases are publicly available, but some are proprietary and access requires authentication through the **UW Libraries (http://www.lib.washington.edu/)** . Information about logging in to use these databases is available on the **Connecting to the Libraries (http://www.lib.washington.edu/help/connect.html)** page.

ACADEMIC CONDUCT

On Plagiarism (http://www.lib.washington.edu/)

I think Charles Blow of the *New York Times* gives very, very good advice. If you have questions about this advice or if you encounter a difficult decision related to crediting people or institutions please don't hesitate to contact David Hendry (**dhendry@uw.edu (mailto:dhendry@uw.edu)**).

> *"I just don't understand plagiarism. Quote marks are FREE. If someone has already said it or said it better than you could, just give them the attribution. Plagiarism to me has always smacked of a deadly combo of laziness and arrogance"* (Charles M. Blow, February 8, 2019, twitter).

Some specific examples, of many:

1. Do not copy and paste text from Wikipedia - or any other website or book or conference proceeding or journal or other work - without giving attribution.
2. Do not copy the structure of a sentence, or longer argument, and replace some of the verbs, nouns, adjectives, or adverbs with new words.
3. Do not copy and paste computer code without given attribution.
4. Do not use an image, figure, table, diagram, or other visual representation without attribution.

As Charles Blow says, "Quote marks are FREE."

Please review the **iSchool Academic Policies (https://docs.google.com/document/d/1Ev3S-JeQlBauLFlEJupXuJJ2z6Ei2Ps7ofDWj0lACyE/preview)** which cover:

- Academic and Behavioral Misconduct
- Academic Integrity
- Copyright
- Privacy
- Concerns About a Course
- Evaluation of Student Work

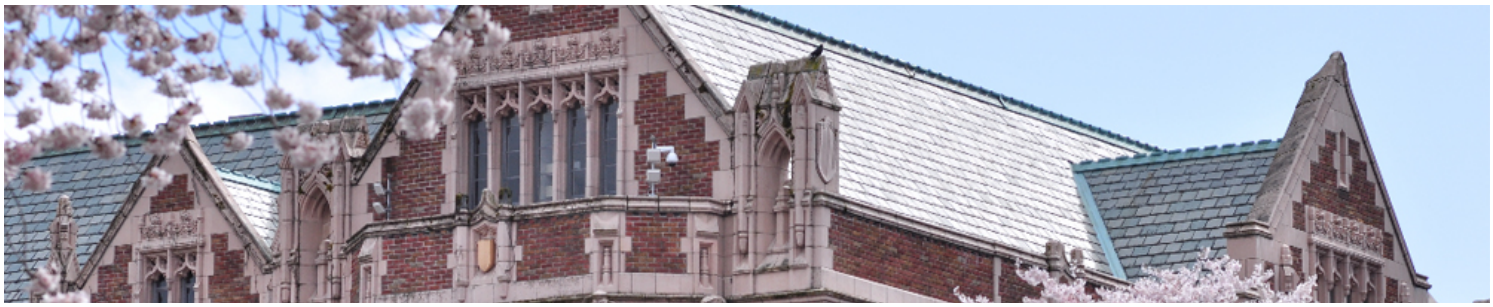
Course Summary:

Date	Details	
Mon Apr 8, 2019	**W01: Tools, Technology, and Human Experience (https://canvas.uw.edu/courses/1273848/assignments/4655333)**	due by 5pm
Mon Apr 15, 2019	**W02: Do Tools and Technology have Values? (https://canvas.uw.edu/courses/1273848/assignments/4655334)**	due by 5pm

Date	Details	
Fri Apr 19, 2019	D01: Stakeholder Analysis / Value Scenarios: Smart home or haunted house (https://canvas.uw.edu/courses/1273848/assignments/4655326)	due by 3pm
Thu May 2, 2019	W01 Iteration: Re-submit (https://canvas.uw.edu/courses/1273848/assignments/4796760)	due by 5pm
	W02 Iteration: Re-submit (https://canvas.uw.edu/courses/1273848/assignments/4796761)	due by 5pm
Fri May 10, 2019	D02: Prototyping and Values (https://canvas.uw.edu/courses/1273848/assignments/4655327)	due by 3pm
Mon May 13, 2019	W03: Technology Projects and Value Sensitive Design (https://canvas.uw.edu/courses/1273848/assignments/4749125)	due by 5pm
Thu May 16, 2019	Design Mini Project - Project notes/presentation update I (https://canvas.uw.edu/courses/1273848/assignments/4752284)	due by 6pm
Fri May 17, 2019	Design Mini Project: Vision (https://canvas.uw.edu/courses/1273848/assignments/4655331)	due by 3pm
Mon May 20, 2019	W04: Technology and Society: To App or Not to App (https://canvas.uw.edu/courses/1273848/assignments/4655335)	due by 5pm
Thu May 23, 2019	Design Mini Project - Project notes/presentation update II (https://canvas.uw.edu/courses/1273848/assignments/4752285)	due by 12pm
Fri May 24, 2019	D03: Inclusive Hackathon Design (https://canvas.uw.edu/courses/1273848/assignments/4655328)	due by 3pm
Mon May 27, 2019	W05: Engineering for Responsibility (https://canvas.uw.edu/courses/1273848/assignments/4655336)	due by 5pm
Thu May 30, 2019	Design Mini Project - Project notes/presentation update III (https://canvas.uw.edu/courses/1273848/assignments/4752286)	due by 12pm
Fri Jun 7, 2019	Design Mini Project: Final Report (https://canvas.uw.edu/courses/1273848/assignments/4655329)	due by 3pm
	Design Mini Project: Picture of Poster (https://canvas.uw.edu/courses/1273848/assignments/4655330)	due by 3pm
	Optional Participation Statement (https://canvas.uw.edu/courses/1273848/assignments/4655332)	due by 3pm

INFO 464A: Value Sensitive Design

Spring 2019 | Tue/Thu 8:30-10:20 in BLD 070 | Tue 10:30-11:20 in BLD 070



Course Schedule

Syllabus (https://canvas.uw.edu/courses/1273848/assignments/syllabus)

Assignments (https://canvas.uw.edu/courses/1273848/assignments)

Instructor & TA Information

David Hendry
dhendry@uw.edu
Office: 330U Mary Gates Hall
Office Hours: Thursday, 12 noon - 1pm or by appointment

Lassana Magassa
lmagassa@uw.edu (lmagassa@uw.edu)
Office Hours: by appointment

Course Schedule

Week 1 (Apr 1-7): Human values and technology - Opening questions

Tue, Apr 2

In our first seminar meeting, we will begin with a greetings exercise. Please consider: What do you want to learn this quarter?

In addition, I will give a course overview and ask some of the key questions that we will take up throughout the quarter. One such question: *What is a value*? I will give a working answer to this question at first meeting and we'll be off and running!

Readings

Friedman, B., Hendry, D. G., and Borning, A. (2017). **A survey of value sensitive design methods (https://canvas.uw.edu/courses/1273848/files/54184159/download?wrap=1)** . *Foundations and Trends in Human-Computer Interaction*, *11* (23), 63-125. [Please read introduction, pp. 64 – 71; Please browse the remainder]

Cheng, K. (2013). **How to survive a critique: A guide to giving and receiving feedback (https://canvas.uw.edu/courses/1273848/files/54184153/download?wrap=1)** . *AIGA*. Retrieved January 1, 2014 from **http://www.aiga.org/how-to-survive-a-critique/ (http://www.aiga.org/how-to-survive-a-critique/)**

Handout

- **Greetings (https://canvas.uw.edu/courses/1273848/files/55311963/download?wrap=1)** (I will bring copies to class).

Thu, Apr 4

In studio we will pursue a simplified value sensitive design process. We'll learn the basics for the following methods:

- Direct and indirect stakeholder analysis
- Value source analysis
- Co-evolution of technology and social structure
- Value scenarios.

We will apply these methods to a pressing problem related to smart homes and the Internet of Things.

Studio handouts

- **Studio (https://canvas.uw.edu/courses/1273848/files/55433258/download?wrap=1)**
- **Methods (https://canvas.uw.edu/courses/1273848/files/55431326/download?wrap=1)**
- **Template (https://canvas.uw.edu/courses/1273848/files/55339446/download?wrap=1)** (docx) | **Template (https://canvas.uw.edu/courses/1273848/files/55339445/download?wrap=1)** (pdf)
- **Reference 1 (https://canvas.uw.edu/courses/1273848/files/56079974/download?wrap=1)**
- **Reference 2 (https://canvas.uw.edu/courses/1273848/files/56079972/download?wrap=1)**

Week 2 (Apr 8-14): Introduction to value sensitive design

Tue, Apr 9

In this seminar we will consider the nature of design, as a broad form of inquiry, and will then consider user-centered design and its relationship to value sensitive design. Specifically, we will introduce value sensitive design, covering some of its theoretical commitments and some of its methods. We'll answer the question: What is the difference between method and methodology?

Readings

Berry, W. (1987). **Preserving wildness (https://canvas.uw.edu/courses/1273848/files/55308772/download?wrap=1)** . *Home Economics* (pp. 137-151). New York: North Point Press.

Fischer, G. (2017). **Exploring design trade-offs for quality of life in human-centered design (https://canvas.uw.edu/courses/1273848/files/55308773/download?wrap=1)** . *Interactions, 25* (1), 26-33.

Bannon, L. (2011). **Reimagining HCI: Toward a more human-centered perspective (https://canvas.uw.edu/courses/1273848/files/55308774/download?wrap=1)** . *interactions 18 (*4), 50-57.

Thu, Apr 11

In studio we will complete the simplified value sensitive design process and develop experience with concept maps for representing stakeholders and values.

Studio handouts

- Please see the previous week for the handouts
- Concept maps
  - **Student examples (https://canvas.uw.edu/courses/1273848/files/55531203/download?wrap=1)**
  - **Method description (https://canvas.uw.edu/courses/1273848/files/55531216/download?wrap=1)**
  - **Process example (https://canvas.uw.edu/courses/1273848/files/55531284/download?wrap=1)** | **Network example (https://canvas.uw.edu/courses/1273848/files/55531278/download?wrap=1)**

Week 3 (Apr 15-21): Technology and Human Experience

Tue, Apr 16

In this seminar we will take up the question: Can *values be embedded in technology?* We'll consider technological and social determinism and the interactional stance, and we will explore the co-evolution of technical and social structure

Readings

Grudin, J. (2006). **The demon in the basement (https://canvas.uw.edu/courses/1273848/files/55311705/download?wrap=1)** . *interactions*, *Nov/Dec*, 50-53.

Kranzberg, M. (1986). **Kranzberg's laws (https://canvas.uw.edu/courses/1273848/files/55311706/download?wrap=1)** . *Technology and Culture*, *27*, 544-560.

Orlikowski, W. J. (2000). **Using technology and constituting structures: A practice lens for studying technology in organizations (https://canvas.uw.edu/courses/1273848/files/55311707/download?wrap=1)** . *Organization Science*, *11*(4), 404-428.

Optional Readings

Flanagan, M., & Nissenbaum, H. (2007). **A game design methodology to incorporate social activist themes (https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:55311974,%22type%22:%22canvadoc%22%7D&hmac=72348e4f88b58f44512dcb0039c670fc180203d6)** **(https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:55311974,%22type%22:%22canvadoc%22%7D&hmac=72348e4f88b58f44512dcb0039c670fc180203d6)** . *Proceedings of CHI 2007* (pp. 181-190). New York: ACM Press.

Thu, Apr 18

In this studio, we will begin to work on the next design mini-project and leave some time aside for finishing up work on first design mini-project.

Studio handouts

- **Envisioning Cards (https://canvas.uw.edu/courses/1273848/files/55793589/download?wrap=1)**
- **studio design brief (https://canvas.uw.edu/courses/1273848/files/55786653/download?wrap=1)** |
  template (https://canvas.uw.edu/courses/1273848/files/55339446/download?wrap=1)

Sustein, C. R. & Thaler, R. H. (2003). **Libertarian paternalism is not an oxymoron (https://canvas.uw.edu/courses/1273848/files/54184157/download?wrap=1)** . *The University of Chicago Law Review*, *70* (4), 1159-1202.

Week 4 (Apr 22-28): Value Sensitive Design: Overview of Method

Tue, Apr 23

Selecting and employing methods • Conceptual, empirical, and technical investigations

Reading activity (https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:55906235,%22type%22:%22canvadoc%22%7D&hmac=1b4a0d3972c718826

6c4c821c9e14aea057a0981) (https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:55906235,%22type%22:%22canvadoc%22%7D&hmac=1b4a0d3972c7188266c4c821c9e14aea057a0981)

Readings

Friedman, B., Hendry, D. G., and Borning, A. (2017). **A survey of value sensitive design methods (https://canvas.uw.edu/courses/1273848/files/54184159/download?wrap=1)** . *Foundations and Trends in Human-Computer Interaction*, *11* (23), 63-125. [Please read sections 2 and 3, pp. 72 – 101]

*Friedman, B., & Hendry, D. (2012). **The envisioning cards: a toolkit for catalyzing humanistic and technical imaginations (https://canvas.uw.edu/courses/1273848/files/55312218/download?wrap=1)** . *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems (CHI '12)* (pp.1145-1148). New York: ACM Press.

Friedman, B., Howe, D. C., & Felten, E. (2002). **Informed consent in the Mozilla browser: implementing value-sensitive design (https://canvas.uw.edu/courses/1273848/files/55312219/download?wrap=1)** . In *Proceedings of the 35th Annual Hawaii International Conference on System Sciences*, 2002.

Thu, Apr 25

Work on design mini project #2. Group presentations.

Reading on **semi-structured interviews (https://canvas.uw.edu/courses/1273848/files/55969778/download?wrap=1)**

Week 5 (Apr 29-May 5): Envisioning

Tue, Apr 30

This week we will explore several different approaches for envisioning.

Slides

D01: Feedback (https://canvas.uw.edu/courses/1273848/files/56050107/download?wrap=1)

Lecture **one (https://canvas.uw.edu/courses/1273848/files/56049846/download?wrap=1)** | **two (https://canvas.uw.edu/courses/1273848/files/56049847/download?wrap=1)**

Readings

Nathan, L. P., Friedman, B., Klasnja, P., Kane, S. K., & Miller, J. K. (2008). **Envisioning systemic effects on persons and society throughout interactive system design**

(https://canvas.uw.edu/courses/1273848/files/55981806/download?wrap=1) . In Proceedings of the Seventh ACM Conference on Designing Interactive Systems (pp. 1–10). New York, NY: ACM.

Woelfer, J. P., Iverson, A., Hendry, D. G., Friedman, B., & Gill, B. T. (2011). **Improving the safety of homeless young people with mobile phones: Values, form and function (https://canvas.uw.edu/courses/1273848/files/55981807/download?wrap=1)** . In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1707–1716). New York, NY: ACM.

*Kensing, F., & Madsen, K. H. (1991). **Generating visions: Future workshops and metaphorical design (https://canvas.uw.edu/courses/1273848/files/55981775/download?wrap=1)** . In J. Greenbaum and M. Kyng (Eds.), *Design at work: Cooperative design of Computer Systems* (pp. 155 - 168). Hillsdale, NJ: Lawrence Erlbaum.

Thur, May 2

During studio we will continue with the design mini project #2 - giving brief presentations on process and solution directions.

Week 6 (May 6-12): Co-Design and Value Tensions

Tue, May 7

Prof. Hendry will be absent. Lassana will be presenting on Diverse Voices - a method for including under represented voice in tech policy development.

Readings (tentative)

Young, M., Magassa, L., & Friedman, B. (2018). **Toward inclusive tech policy design: a method for underrepresented voices to strengthen tech policy documents (https://techpolicylab.uw.edu/wp-content/uploads/2019/03/TowardInclusiveTechPolicyDesign.pdf)** . Ethics and Information Technology, 1-15.

Optional Readings

Nussbaum, M. (2000). **The Costs of Tragedy: Some Moral Limits of Cost-Benefit Analysis (https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000003159805,%22attachment_id%22:56056785,%22type%22:%22canvadoc%22%7D&hmac=e98e85db0652f5b064d4d9fe222a67b80df44130)**  **(https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user**

_id%22:100000003159805,%22attachment_id%22:56056785,%22type%22:%22canvadoc%22%7D&hmac=e98e85db0652f5b064d4d9fe222a67b80df44130) . *The Journal of Legal Studies*, *29*, 1005–1036.

Lim, Y.-K., Stolterman, E., & Tenenberg, J. (2008). **The Anatomy of Prototypes: Prototypes As Filters, Prototypes As Manifestations of Design Ideas (https://canvas.uw.edu/courses/1273848/files/56056944/download?wrap=1)** . *ACM Trans. Comput.-Hum. Interact.*, 15(2), 7:1–7:27.

Thu, May 9

Prof. Hendry will be absent. Lassana will be available to answer project questions and provide guidance on finishing your projects.

Week 7 (May 13-19): Value Focus – student choice

Tue, May 14

We'll consider privacy. The New York Times has an interesting series of articles called the **Privacy Project (https://www.nytimes.com/interactive/2019/opinion/internet-privacy-project.html?action=click&module=Opinion&pgtype=Homepage)** . Consider these one of readings:

- **I don't care. I love my iPhone (https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:56416248,%22type%22:%22canvadoc%22%7D&hmac=3c9654e85f412e26bc261609cef82df583508eb1)** **(https://canvas.uw.edu/api/v1/canvadoc_session?blob=%7B%22moderated_grading_whitelist%22:null,%22enable_annotations%22:null,%22enrollment_type%22:null,%22anonymous_instructor_annotations%22:null,%22submission_id%22:null,%22user_id%22:100000000616108,%22attachment_id%22:56416248,%22type%22:%22canvadoc%22%7D&hmac=3c9654e85f412e26bc261609cef82df583508eb1)** .
- **The devastating consequences of being poor in the digital age (https://canvas.uw.edu/courses/1273848/files/56416259/download?wrap=1)** .

Consider the values at stake. What are they and do these values come to the foreground through technologies? How can value sensitive design be used to clarify these socio-technical contexts?

Thu, May 16

Design mini project studio. You will present on your project vision, ask and take questions, and iterate on your project.

Read

- **Design Brief (https://canvas.uw.edu/courses/1273848/pages/open-vsd-design-project-design-brief)**

Week 8 (May 20-26): Technology Focus – student choice

Tue, May 21

What technologies would you like to take up this week?

Readings

- **Automating New York City (https://automating.nyc/#introduction)**
- **D02 feedback (https://canvas.uw.edu/courses/1273848/files/56589625/download?wrap=1)**

Thu, May 23

Project preparation

Week 9 (May 27-Jun 2): Tech Policy

Tue, May 28

What is policy? How can policy shape technology and technology develop?

Readings

Jeroen van den Hoven (2013). **Value sensitive design and responsible innovation (https://canvas.uw.edu/courses/1273848/files/54184154/download?wrap=1)** . In *Responsible Innovation* (pp. 75–83). John Wiley & Sons, Ltd, 2013. ISBN 978-1-118-55142-4.

Weizenbaum, J. (1972). **On the impact of the computer on society (https://canvas.uw.edu/courses/1273848/files/55349074/download?wrap=1)** . *Science*, *176* (4035), 609–614.

Crawford, K., and Calo, R. (2016). **There is a blind sport in AI research (https://canvas.uw.edu/courses/1273848/files/55348891/download?wrap=1)** . *Nature*, *538* (7625), 311–313.

Optional Reading

Wallach, W. (2015). *A Dangerous Master: How to Keep Technology from Slipping Beyond Our Control*. New York: Basic Books.

Ethics in Technology Jobs (https://canvas.uw.edu/courses/1273848/files/56801395/download?wrap=1)

Thu, May 30

Project preparation.

Week 10 (Jun 3-9): Summary and Next steps

Tue, Jun 4

This week, we'll sum things up and consider the next steps for applying and developing value sensitive design

slide (https://canvas.uw.edu/courses/1273848/files/56927889/download?wrap=1)

Readings

Berry, W. (1987). **Preserving wildness (https://canvas.uw.edu/courses/1273848/files/55308772/download?wrap=1)** . *Home Economics* (pp. 137-151). New York: North Point Press.

The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems (2019). **Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems (https://canvas.uw.edu/courses/1273848/files/55348413/download?wrap=1)** , First Edition. IEEE, 2019. https://standards.ieee.org/content/ieee-standards/en/industry-connections/ec/autonomous-systems.html

Thu, Jun 6

Design expo and project posters.