Course Syllabus

CS 410/510: Cultural Competence in Computing

Class Description

In this course, we will learn about different identities (e.g., race, ethnicity, gender, class, sexuality, and ability), understand the biases that we might have, and learn how to create accessible and equitable products and more inclusive communities at school, in industry, and beyond.

Class Objectives

Upon successful completion of this course, students will be able to:

1. Identify ways in which society, computing systems and organizations can advantage or disadvantage people based on their identities.
2. Describe strategies for designing systems, products, and applications to protect members of marginalized groups.
3. Distinguish between diversity, equity, and inclusion and describe their impacts on developers and users of computer systems.
4. Apply an equity lens to explore the potential for differential impacts resulting from the use of computing technology.
5. Articulate principles and considerations for use in the design of equitable systems.
6. Explain what is meant by algorithmic bias and describe examples of how it can occur in real-world settings such as hiring practices, voice recognition, predictive policing, and more.
7. Graduate students only: Demonstrate the ability to communicate their findings through a presentation to a larger group.
8. Graduate students only: Communicate the process of developing their final project by articulating principles and considerations for use in the design of equitable systems.

Prerequisites

Admission to the program.

Students taking this class should be curious to learn about different identities and how to shape the technology they will build to better support and empower everyone. Students are expected to actively participate in in-class discussions and discussion groups.

Class Details

Course Information

Class will take place on Tuesdays and Thursdays from 2:00-3:50 pm on **Zoom** ⤷ **(https://pdx.zoom.us/j/82680755322?pwd=NTdyb29Ga1RqWkxFMGFMQkIvMlpzUT09)** (meeting id: 826 8075 5322 / passcode: 3c).

Instructors

Mark Jones (he/him) - **mpj@pdx.edu (mailto:mpj@pdx.edu)**

Caterina Paun (she/her) - **caterina@pdx.edu (mailto:caterina@pdx.edu)**

Office Hours

Office hours will take place on Mondays, starting in the second week of the term (April 10), from 10:00-11:00 am on **Zoom** ⤷ **(https://pdx.zoom.us/j/84702996542)** (meeting id: 847 0299 6542 / passcode: officehour).

Major Topics & Tentative Schedule

- **Identity and Intersectionality:** Learn about different identities, including race, ethnicity, gender, class, sexuality, and ability; how they are related; and how they impact computing practices.

- **Algorithmic Bias:** Investigate what is meant by algorithmic bias and examine real-world examples such as facial and voice recognition, healthcare, surveillance, and more.

- **Design of Equitable Systems:** Develop skills to identify ways in which computing systems impact marginalized identities and apply strategies to create more equitable approaches.

Dates	Topics	Assignments Due
Week 1 Apr 4, 6	Module 1: Identity and Intersectionality Topic: Introduction to the Course / Ground Rules / Code of Conduct / Concepts of Identity	Canvas Discussion 1
Week 2 Apr 11, 13	Topic: How Can We Build a More Accessible World	Canvas Discussion 2

Week 3 Apr 18, 20	Topic: Defining Racism	Canvas Discussion 3
Week 4 Apr 25, 27	Topic: Navigating a Gendered World	Canvas Discussion 4
Week 5 May 2, 4	Topic: The Genderbread Person	Canvas Discussion 5
Week 6 May 9, 11	Module 2: Design & Algorithmic Bias Topic: Hiring Practices	Canvas Discussion 6
Week 7 May 16, 18	Topic: Voice Recognition	Canvas Discussion 7
Week 8 May 23, 25	Topic: Predictive Policing	Canvas Discussion 8
Week 9 May 30, June 1	Module 3: Design of Equitable Systems Topic: How Can We Design More Equitable Systems	Canvas Discussion 9
Week 10 June 6, 8	Topic: How Can We Design More Equitable Systems Final Project Presentations	Canvas Discussion 10
Finals Week Mon Jun 12, 10:15	Final Project Presentations	Final Project Due

Course Logistics

Textbooks

No required textbooks; instructors will provide pointers to online reading and videos during the course.

Assignments

Students will be graded on class participation, Canvas discussions, a final project, and a presentation of the final project.

Grading Policy

- Attendance - 10%
- Participation - 30%
- Canvas Discussions - 30%
- Final Project - 30%
  - Report - 20%
  - Presentation - 10%

Access and Inclusion for Students with Disabilities

PSU values diversity and inclusion; My goal is to create a learning environment that is accessible, equitable, inclusive, and welcoming. I am committed to fostering mutual respect and full participation for all students. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. Additionally, the Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment. The DRC works with students who have physical, learning, cognitive, mental health, sensory, chronic illness, and other disabilities.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations.

If you already have accommodations, please contact me to make sure that I have received your DRC Faculty Notification Email so we can discuss your accommodations.

The DRC is located in 116 Smith Memorial Student Union, Suite 116. You can also contact the DRC at 503-725-4150 or you can [visit the](http://voice.google.com/calls?a=nc,%2B15037854150) DRC's website [(https://www.pdx.edu/disability-resource-center)](https://www.pdx.edu/disability-resource-center).

Academic Misconduct

"(9) Academic Misconduct. Academic Misconduct is defined as, actual or attempted, fraud, deceit, or unauthorized use of materials prohibited or inappropriate in the context of the academic assignment. Unless otherwise specified by the faculty member, all submissions, whether in draft or final form, must either be the Student's own work, or must clearly acknowledge the source(s). Academic Misconduct includes, but is not limited to: (a) cheating, (b) fraud,(c) plagiarism, such as word for word copying, using borrowed words or phrases from original text into new patterns without attribution, or paraphrasing another writer's ideas; (d) the buying or selling of all or any portion of course assignments and research papers; (e) performing academic assignments (including tests and examinations) in another person's stead; (f) unauthorized disclosure or receipt of academic information; (g) falsification of research data (h) unauthorized collaboration; (i) using the same paper or data for several assignments or courses without proper documentation; (j) unauthorized alteration of student records; and (k) academic sabotage, including destroying or obstructing another student's work.**"**

Any academic misconduct, including plagiarism, will result in severe penalties. All incidents of academic misconduct will be reported to the PSU Conduct Office. If you have questions, please contact me for clarification. You can also consult the **PSU Code of Student Conduct (https://www.pdx.edu/dos/psu-student-code-conduct)** for more guidelines.

Responding to Students in Distress

PSU is committed to providing students with an educational environment where students may thrive in their educational pursuits. Incidents of interpersonal violence or sexual harassment may create barriers to students completing their education. We at Portland State support students to help them overcome these barriers. PSU's Dean of Student Life, Title IX Coordinator, Interpersonal Violence (IPV) Advocates and CARE team are committed to assisting students who have experienced any form of sexual harassment or interpersonal violence.

Title IX of the Educational Act of 1972 requires educational institutions (PSU) to provide academic and employment support to students and/or employees, including student employees, who experience sexual harassment, sexual assault or any other form of interpersonal violence. Academic and employment support includes, but is not limited to,

- Providing additional time to complete assignments or to take exams;
- Completing the course without attending the lectures;
- Providing academic support, such as tutoring;
- Arranging to have extra time to complete or retake a course or withdraw from a course without an academic or financial penalty;

- Providing a No Contact Order (NCO) between the victim and the alleged perpetrator, where the victim and the alleged perpetrator may not contact each other;
- Changing the alleged perpetrator or the victim's course to prevent both students from being in the same course;
- Providing excused absence from employment with PSU for a reasonable time; and
- Changing hours of employment or department of employment at PSU.

PSU must provide these academic and/or employment supports whether or not the student decides to report the matter to the Office of the Dean of Student Life or the Office of Equity and Compliance. An IPV Confidential Advocate, the CARE Team Case Manager, the Assistant Dean/Director of Conduct and Community Standards or the Title IX Coordinator may contact a faculty member/instructor and/or a supervisor to arrange for academic and/or employment support for a student or employee who has experienced interpersonal violence. If a faculty member or supervisor has any questions about providing the necessary academic or employment support, the faculty member should contact PSU's Title IX and 504/ADA Coordinator, Rebecca Lawrence, at titleixcoordinator@pdx.edu or 503.725.4410.

If you have any questions about Title IX, please contact PSU's Title IX Coordinator, Rebecca Lawrence at titleixcoordinator@pdx.edu or 503.725.4410. Rebecca's office is located at 1600 SW 4th Ave, In the Richard and Maureen Neuberger Center RMNC - Suite 830. Title IX pertains to any form of sex/gender discrimination, discriminatory harassment, sexual harassment or sexual violence.