

Incorporating Diversity into a Traditional CS Course

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About the Course

CIS 350 Software Design & Engineering (http://www.seas.upenn.edu/~cis350) is a traditional software development lifecycle course targeted at sophomores and juniors. The course had an enrollment of 202 students in Spring 2019 and has an enrollment of 77 in Fall 2019.

Signaling

There are many ways to signal that diversity and inclusion are important to the instructor and the teaching staff, regardless of the course subject, including:

- Hiring a diverse team of Teaching Assistants
- Listing preferred gender pronouns on the course website and syllabus
- Posting introductions/bios in which TAs describe communities with which they identify
- Including a statement on diversity and inclusion in the course syllabus
- Inviting representatives from minority-serving student groups to do in-class presentations
- Encouraging students to share articles related to diversity in computing in the course discussion forum
- Incorporating diversity-related themes into assignments

Interventions

In Spring 2019, the Software Engineering course at UPenn introduced reading assignments on diversity and inclusion in the tech industry and in the field of computing, focusing on issues faced by members of various underrepresented and marginalized groups in computing (including women, people of color, members of the LGBT community, and people living with disabilities) as well as articles on allyship and strategies for fostering inclusive communities.

Optional biweekly discussion sessions were held so that students could share their experiences and observations. Students received credit toward their course participation/contribution grade for attending these sessions.

The sessions were led by a TA for Diversity & Inclusion, whose responsibilities included organizing the reading assignments and discussion sessions, and sharing articles and other resources around diversity in computing.