CSCI 15: Exploring Bias in Computing (Winter 2022)

Course page	https://glow.williams.edu/courses/3339971
Instructors	Kelly Shaw (kshaw@cs.williams.edu) Shikha Singh (shikha@cs.williams.edu)
Class Schedule	TuWeTh 10:00 am - 11.50 am
Class Location	(For first week) Zoom link: https://williams.zoom.us/j/94017746652?pwd=WXRQWmpzTVVkb1R6YmZGOGxDY3RHUT09 **Classroom:** Wachenheim 019

Course description: This course will explore bias in computing at several levels with a focus on how data and technology intersect with and have an impact on different identities in computing. It will examine how bias towards different identities (such as gender, race, ethnicity, socio-economic status, ability, and sexual identity) impacts individuals working in the computing field. It will also examine how these biases can be embedded in data, algorithms, predictive models, and physical products.

The content of this course will roughly be divided into the following three parts:

- Understanding different identities and intersectionality
- Exploring the history and status quo of diversity, inclusion and equity in Computer Science (both in academic and industry)
- Exploring bias in algorithms, prediction models, and technological products

We plan to spend roughly 4 class meetings on each of the above three parts.

Organization: We will meet three times a week for 2 hours. The meetings will primarily be discussion based, with readings, recordings, and videos serving as a guide to seed these discussions. Students should expect to spend ~2 hours per week on assigned work outside of class time.

Readings: The assigned readings, such as articles or book chapters, will be posted on the GLOW course page. In terms of textbooks, students will be assigning readings from: *Algorithms of Oppression*, *Data Feminism*, and *Weapons of Math Destruction*. Students are not expected to buy these books (although two of them have been listed with the campus bookstore): the first two are available as eBooks in the Williams Library, and the assigned chapter from the third will be provided as a scanned PDF.

Final paper and presentation: As the final assessment, students will be asked to write a 5-page paper on an assigned topic and give a 10 minute class presentation on their paper.