Course Information

Location: Pierce 100F (course), MD G115 (seminar talks)

Meeting Time: Wednesday 3-4:15PM, Friday 3-4:15PM (course), some Fridays 1:30-2:30PM (talks)

Instructor: Daniel Weinstock (Maxwell Dworkin G107, dweinsto@seas.harvard.edu)

Course Overview

This course, centered on the Institute for Applied Computation Science (IACS) seminar series, will provide broad exposure to cutting-edge topics, applications, and unifying concepts in Computational and Data Science. Students will read, present and discuss journal articles related to IACS talks, attend the seminars and meet with visiting speakers.

Learning Objectives

1. Understand how topics from IACS courses are applied to cutting edge research projects.
2. Gain experience communicating about computational science with students from other disciplinary backgrounds.
3. Develop critical reading, scientific writing, and presentation skills
4. Gain experience actively engaging with researchers on topics beyond oneâ€™s own area of expertise.
5. Develop the ability to think about how topics presented in seminar talks can be applied to oneâ€™s own research interests.

Class Organization

On weeks in which an IACS seminar is scheduled, on Wednesday the class will have a discussion about the work of that weekâ€™s speaker or related work. On Friday students are expected to attend the seminar talk at 1:30PM in MD G115. During class on Friday, we will invite the speaker back to Pierce 100F to meet with the class for Q&A.

On weeks when there is not a scheduled seminar, the class will spend the full class time in Pierce 100F. During these weeks the focus will turn to the presentation of scientific and computational material. Students will receive training in effective presentation strategies, practice giving presentations to their peers and discuss the merits of the presentations given by the seminar speakers.

Assignments and Grading

Students will be responsible for: 1) Particpation in class discussion and interaction with the invited speakers 2) leading discussion of background reading or a seminar talk; and 3) a presentation on a computational topic.

All students are responsible for assigned class readings and are expected to actively participate in class discussion.

Particpation 60%

Discussion leadership 20%

Presentation 20%

Accommodations for students with disabilities

Students needing academic adjustments or accommodations because of a documented disability must present their Faculty Letter from the Accessible Education Office (AEO) and speak with the instructor by the end of the second week of the term. Failure to do so may result in an inability to respond in a timely manner. All discussion will remain confidential, although we may contact AEO to discuss appropriate implementation.