

Course Goals

As you do the readings and assignments for this class, you will get the most out of them if you strive to make your work align with the following goals.

1. **Improve your ability to read data as a primary source.** In your humanities and social science courses, you've probably learned how to read a variety of artifacts: poems, speeches, articles, natural experiments, and so forth. Contrariwise, in your computer science courses you've probably *used* lots of pre-selected and controlled data in order to learn how to program for particular results. In this class, we will do some of both those things, but we're going to be particularly focused on improving your ability to integrate your readings of the "real world" and your work with data and programming. We want to help you "read" data as a complex product of human intentions and actions.
2. **Designing computational approaches to social questions.** Computation is a powerful tool that can be applied to all sorts of questions. In the humanities and social sciences, the greatest challenges are frequently not in figuring out how best to execute a computational approach but in finding what a useful computational approach might be. How do you find or create data that is useful for your questions? What tools are particularly useful at describing the messy world of historical artifacts and social relations? What sort of work is a computational model good for in the end, anyway? You'll learn to do this in your own projects and through exposure to a variety of scholars and professionals who do it in their day-to-day work.
3. **Integrating programming into developed systems.** As you continue in a CS major or minor, you'll increase the range of problems you can solve by programming things yourself. But you'll always need to integrate the tools that you build yourself with tools and systems designed by others. In this class, we will help you develop good practices for such integration that will serve you well in the future.
4. **Understanding a place from a variety of disciplinary and cultural perspectives.** We sometimes talk in this course about the "Humanities and Social Sciences" as one thing. As anyone with an office in Renaissance Park will tell you, they're not! By learning about the city of Boston from a variety of perspectives, you'll develop a flexibility in problem solving that can be very valuable.
5. **Creating a rich understanding of the city and region of Boston.** Finally, we want you to deepen and broaden your understanding of the place you've chosen to go to call home during a significant period of your lives. Boston today is interesting, but the city has layers of historical, cultural, and political interest that make it all the more vibrant for an observant citizen.