

COM 381/581: Information Structure and Retrieval

Spring 2019

Tuesday/Thursday, 5:00-6:15 p.m., SH 237

Instructor: Andrew Roback

Office: SH 231

Office hours: Tuesday/Thursday, 3:15-4:30 p.m., or by appointment

Introduction

In the early days of the web, information that was “digitized” was mostly housed on static documents that were difficult to find using existing search means. Fast forward to 2019, and copious amounts of information are available, including vast oceans of user-generated content. Advanced search algorithms make it easier to find (or be served up) information specific to individual user context. Nevertheless, we still struggle with making that information more useful to humans and machines, as well as making useful information easier for users to find. This course will examine several different methods of structuring, labeling, and organizing information. By the end of the course, you should be able to analyze a set of information and make well considered decisions on how to structure that information for maximum utility.

Required books

Below are the required books for the course. I have included links to Amazon to ensure that you purchase the correct editions; don't feel constrained to purchase from that retailer. If you purchase a used book, make sure it will arrive in time for the course readings. Note: I did not place an order at the university bookstore, so you won't find these titles there. Any readings not from these books will be posted on Blackboard.

Rosenfeld, Morville, & Arango (2015). *Information Architecture for the Web and Beyond*. 4th ed. Boston: O'Reilly. [\[Amazon\]](#)

Buckland (2017). *Information and Society*. Cambridge, MA: MIT Press. [\[Amazon\]](#)

Assignments

All assignments will have specified due dates listed on the syllabus. Please note that I do not accept late assignments unless you have an emergency situation that prevents you from submitting the work. If that is the case, contact me as soon as possible to make alternative arrangements.

Daily Discussant (15%)

You will sign up for a day to be the discussant in class, then generate three reading questions for the day. I will also expect you to come to class prepared to participate in leading the discussion for that day. You'll post the questions to a Blackboard discussion forum 48 hours before the class meets to discuss those readings. We'll sign up for slots during the first week, and I'll post some example questions to show you what I expect.

Labs (30%)

We'll have five lab sessions this semester. On Thursday during the lab session, we'll review a problem that you'll work either independently or in teams to solve. On the following Tuesday, we'll meet to showcase your work and have a discussion on the approaches you took to solving the issue. These labs are learning experiences that will ask you to work with data/information to master the techniques of information architecture. Each lab will have slightly different work, so the exact requirements of each assignment will be posted with the description. We'll also walk through what I expect you to do/turn in during the lab session.

Final Project (40%)

For your final project, you will locate and work on a plan to structure a large information set and prototype the methods you will use to do so. The final project will include a write up of your efforts that reflects on how the principles discussed in the course readings apply to your project. We will have periodic meetings/informal presentations to update each other on our progress and share strategies for accomplishing our various tasks. More details to come later in the semester.

Graduate students: In addition to the project above, you will write a research paper suitable for presentation at an upcoming conference either as a paper or poster. I will work with you to determine a suitable venue for your research.

Participation (15%)

I expect you to come to class ready to discuss readings and participate in activities. We'll also have time in class to work on some of the projects, and I expect you to use that time

appropriately. Working on outside work during class is not allowed. Please also keep phone use, email checking, and chatting to the absolute minimum. Please note that if you sit silently the entire semester and never participate in discussion, your grade for this component will suffer significantly. Points go to people who actively participate in class discussion and activities.

Grading Scale

All grades on assignments are weighted to their corresponding values on the syllabus. To calculate your grade, take the percentage grade I give you on an assignment, multiply by the value on the syllabus, and add the resulting figures. That is your final grade in the course.

Grade	Percent
A	90-100
B	80-89
C	70-79
D	60-69
E	<60

Attendance policy

I have a zero tolerance attendance policy. You can miss up to three class meetings without penalty. After that, I'll reduce your final course grade by ten percent for each additional absence. If you miss more than six class meetings, your final grade in the course will be an "E" (provided they are not excusable absences such as illness, family emergency, etc.). If you are more than 15 minutes late for class, it counts as an absence.

Family and health emergencies happen and are excused absences; however, you must notify me as soon as reasonably possible if such a situation arises. If you stop attending class without a notification, I will assume you are not coming back and issue a grade of "E" for the semester. If you receive an email from me regarding absences and you do not reply, I will make the same assumption.

Finally, having a lot of work in your other classes is not an excuse for missing this class, nor are extracurricular activities unrelated to official university events or professional development (e.g. academic conferences, athletic events, etc.). Seek permission for excused absences from me in advance whenever possible.

FAQ and tips for a successful semester

- If I give you an extension due to extenuating circumstances and you fail to meet the agreed upon deadline, you will receive a zero on that assignment.
- There is no extra credit in this course.
- Take notes. They will help you remember the main points of our discussion and help you to use tools outside of class.
- Make friends with a classmate so you can borrow notes if you are absent.
- Please refer to the syllabus/course schedule/assignment guide before emailing me with questions. Questions about submission method, dates, or requirements that can be answered by the above documents will result in a friendly reminder to reread the documents.
- If you are having trouble with the coursework or understanding the material, come talk to me. I have office hours before class (see first page), and I have no problem staying afterwards (unless I have a meeting). If you have a conflict and can't make it to office hours, send me an email to set up an appointment to meet online.

Plagiarism and academic dishonesty

You are expected to adhere to all IIT rules regarding academic honesty and conduct. Please familiarize yourself with the Student Handbook policies. Plagiarism is the appropriation of ideas without appropriate attribution of those ideas to the original author. Reordering words or sentences but conveying the same ideas as another author and representing those ideas as your own still constitutes plagiarism. The same goes for computer code, graphs, and illustrations: unless you wrote/made it, proper citations are required. I expect you to write everything you submit for this class. Unless I tell you to work in teams, your work should be solely your own.

If I detect any plagiarized content in your work, you will automatically fail the assignment and, depending on the severity of the infraction, the course. Additional penalties may be imposed by the University, such as academic sanctions and/or expulsion. If you are concerned that your work might constitute a breach of academic integrity, contact me via email before turning in your assignment and I will advise you. I will report plagiarism to the appropriate university authorities without exception and issue failing grades as necessary to prevent academic dishonesty.

The Writing Center (SH 232-233)

The Writing Center is a tutoring service that helps students develop writing skills critical to success in academic and professional pursuits. I strongly encourage any student to visit the Writing Center if you are having difficulty with any part of the writing process or if you simply want some feedback on your writing from another writer. Since you will be writing a great deal in this class (and, presumably, your entire life), it is to your benefit to take advantage of this free service to help you become a better writer.

Special Needs

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources and contact me in the first week of the course. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312-567-5744 or disabilities@iit.edu.