

CS102T: The Socio Techno Web

Syllabus for Fall 2017

General Info

Instructor:	Prof. Bill Jannen
Office:	TCL 306
Phone:	597-4509
Email:	jannen@cs.williams.edu
Meetings:	At selected times for 60 minutes in TCL 306
Labs:	Friday 11-12:15pm in TCL 217
Course Web Page:	http://www.cs.williams.edu/~cs102

Texts

We will be using the following books in this course:

- *Blown to Bits: Your Life, Liberty, and Happiness after the Digital Explosion* by Hal Abelson, Ken Ledeen and Harry Lewis.
- *Weaving the Web* by Tim Berners-Lee.
- *Data and Goliath* by Bruce Schneier.

Throughout the semester, we will also read selections from other texts, including sources that you will search out and select on your own. Additional readings will be digitally accessible from the course website; they will be accessible while on-campus or off-campus using the library proxy server.

Course Description

This course introduces many fundamental concepts in computer science by examining the social aspects of computing. As more and more people use the technologies and services available via the Internet, online environments like Facebook, Amazon, Google, Twitter, and blogs are flourishing. However, several of the problems related to security, privacy, and trust that exist in the real world transfer and become amplified in the virtual world created by the ubiquity and pervasiveness of the Internet. In this course, we will investigate how the social, technological, and natural worlds are connected, and how the study of networks sheds light on these connections. Topics include the structure of the Social Web and networks in general; issues such as virtual identity, personal and group privacy, trust evaluation and propagation, and online security; and the technology, economics, and politics of Web information and online communities. No background in computer science or programming is required or expected.

Course Objectives

Upon the completion of this course, students:

- should have the ability to understand and speak fluently about new web technologies;
- should, when presented with a new web technology, be able to evaluate that technology through both social and technical lenses;
- should be able to critically read texts and understand the texts' content and arguments;
- should be able to communicate through writing—to both technical and non-technical audiences—and share that writing on the web;
- should understand some of the most pervasive web technologies—HTML, CSS, and Javascript—at a level of proficiency to make a functional personal website; and
- should understand version control systems and use them to collaborate and manage projects.

Course Structure

Tutorial meetings. This course will be taught as a tutorial. *Attendance at tutorial meetings is mandatory.* There are valid reasons to miss a meeting, but each unexcused tutorial absence will result in a loss of one letter grade.

Writing Assignments. Over the course of the semester, each student will complete approximately 6 short papers (3–4 pages each) and 6 short responses (1–2 pages each). Paper writers will typically be asked to summarize the key ideas from the readings and take a stance on some of the controversial issues addressed. The goal of the papers is to make and support a persuasive argument, with external support when possible. Responders will typically be asked to challenge the arguments made by the paper writers and present counter-arguments. Both paper writers and responders will be expected to discuss technical and social content with conciseness and clarity, and students are expected to take advantage of the rich medium of the web.

Labs. There will be a weekly lab as part of this course. Labs will focus on fundamental web technologies, including HTML and Javascript. One outcome of your lab work will be an individual website where you will post and share your weekly writing assignments. Lab work will be evaluated based on quality, completeness, correctness, and creativity.

Projects. There will be one mid-semester and one final project. The mid-semester project will replace the weekly tutorial meeting for the week of October 9. You will be assigned a topic/technology that we have not covered in the course. You will be asked to independently research that topic, explain the topic in language suitable for a non-technical audience, and write about that topic through a social lens.

Grading. Grades for this course will be determined as follows:

Meeting Participation and Preparation:	25%
Written Assignments and labs:	35%
Mid-semester project:	15%
Final project:	25%

Honor Code

Uncredited collaborations will be considered a violation of the honor code and will be forwarded to the honor committee. If in doubt of what is appropriate, do not hesitate to ask your instructor. For a full description of the Computer Science Honor Code, please see <https://csci.williams.edu/the-cs-honor-code-and-computer-usage-policy/>.

Writing assignments. I encourage students to read together and discuss *content related to the weekly readings* with course members who are not their tutorial partner (unless stated in the assignment, tutorial partners may not discuss material outside of tutorial meetings). However, discussions must be properly cited and all writing assignments are to be the sole work of each student.

Lab assignments. The *technical material* in lab assignments may be discussed with classmates, but discussions must be properly cited. Students may never look directly at another students' code, but students may work through abstract examples together on paper or on a chalkboard.

Projects. Projects may only be discussed with the course instructor.

Citing your work. All direct quotations, paraphrased language, ideas, and facts must be documented with proper citation. Unless the assignment states otherwise, you should use the Chicago Manual of Style Notes/Bibliography system (instructions: <http://libguides.williams.edu/citing/chicago-notes>).

Workload. At Williams, we operate under the course unit system (rather than the credit hour system). You should expect to spend (on average) at least 13 hours per week on the academic and creative work related to class. This includes time spent meeting as a class and working on assignments. The Office of the Registrar explains the relationship of course units to credit hours in greater detail.