

TCSS 452/552 Syllabus Winter 2013

1. THE BASICS

Instructor: Josh Tenenberg

Location: CP 324

Class meetings: T/TH 8:00am-10:05am

Instructor's Office: Cherry Parkes 335

Instructor's Office Hours: just after class and by appointment

Course homepage: <http://faculty.washington.edu/jtenenbg/courses/452/w13/>

2. PREREQUISITES

The prerequisites for this course are a minimum grade of 2.0 in TCSS 142.

3. TOPIC OVERVIEW

People are intrinsically active. We act in order to satisfy our basic needs, such as for food and shelter, and to satisfy our higher level needs, such as for love and meaning. Because of our biological endowments and social cooperation, we are able to shape our biophysical environment in specific ways to help us satisfy our needs. Some of these ways concern the intentional design of physical objects, which we call "tools" or "instruments" or "technologies". Tools, including those that are digital, represent crystallizations of knowledge accumulated historically by people who have encountered various circumstances in the past. And although people shape tools, tools also shape human action and interaction.

Interaction design concerns the deliberate shaping of digital tools for use by people to satisfy their needs. Because these tools exist within social settings, they become resources from which people construct their social, political, economic, and moral lives. In this course, you will *do* interaction design; you will *be* interaction designers for your short time here. More than anything this means cultivating your ability to envision. You will envision the design of technologies that do not yet exist but, if realized, will result in net benefits for the people involved and affected. Doing interaction design is thus both a technical as well as a moral enterprise. Shaping the future comes with responsibilities.

The basic activities of this enterprise will involve understanding users' needs, sketching, making design tradeoffs, choosing from among design alternatives, representing, communicating, and critiquing designs, prototyping, usability testing, and reflecting on design activity.

4. STUDENT LEARNING GOALS

The student learning goals for the course are to:

1. carry out user inquiry to understand human needs in particular contexts;
2. construct design sketches and prototypes to manifest design ideas;
3. construct narratives of use so as to envision designs in use;
4. reflect on the design process to make learning visible;
5. carry out a usability studies to get feedback on the user experience.
6. work effectively in teams to carry out much of the above work;

The CSS Degree Student Learning Outcomes that this course contributes to are:

- a. an ability to apply knowledge of computing and mathematics appropriate to the discipline;
- b. an ability to analyze a problem, identify and define the computing requirements appropriate to its solution;

- c. an ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;
- d. an ability to function effectively on teams to accomplish a common goal;
- e. an understanding of professional, ethical and social responsibilities;
- f. an ability to communicate effectively with a range of audiences;
- g. an ability to analyze the impact of computing on individuals, organizations and society, including ethical, legal, security and global policy issues;
- i. an ability to use current techniques, skills, and tools necessary for computing practice.

The UWT Student Learning Goals that this course contributes to:

Inquiry and Critical Thinking

Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.

Civic Engagement

Students will define their roles and responsibilities as members of a broader community and develop an understanding of how they can contribute to that community for the greater good.

Communication/Self-Expression

Students will gain experience with oral, written, symbolic and artistic forms of communication and the ability to communicate with diverse audiences. They will also have the opportunity to increase their understanding of communication through collaboration with others to solve problems or advance knowledge.

5. READINGS

There is no course text. There are weekly readings available via the Internet. These should be read by the start of the week in which they are indicated in the course schedule (on the course homepage). Please bring each reading to class.

6. COURSEWORK

This course is a 5-credit course. As such, it will require a considerable amount from you, in terms of both time, energy, and commitment. I consider the following an estimate of the minimal amount of time that this course will require each week: 4.5 hours of class attendance, 1.5 hours for reading, 2 hours for group meetings, 6 hours of project work, all totalling 14 hours. Note that this is an estimate, and it is likely to be the minimal amount of time that will be required. If you believe that you are unable to meet these time commitments due to external constraints, please discuss this with the instructor immediately. This may result in your reducing some of your external commitments or deferring attendance in this course for a term in which you have fewer such constraints.

Each assignment is to be handed in no later than the start of class on the specified due date. Late assignments will not be accepted. It is recommended that you turn in something rather than nothing, even if it is incomplete. With due cause, exceptions to this policy will need to be negotiated with the instructor; emergency documentation may be required and/or late penalties may be given, depending upon the circumstances.

The assignments and grade weightings are as follows.

- Project deliverables: 72%, with each of the three deliverables weighted equally.
- Project check-ins: 15%, with each of the five check-ins weighted equally.

- Weekly Reports: 7% total, weighted equally, with the lowest grade dropped from the final grade calculation.
- Technology use and breakdown assignment: 6%.
- Hall of Fame and Shame: 10% (**552 students only**)

I reserve the right to make small adjustments to grade weights, or to add/remove assignments as the need arises. The specifics of each assignment are detailed in separate web pages linked from the [assignments webpage](#). Below are brief descriptions of each.

6. a Project check-ins, deliverables, and weekly reports

This course is centred on a term-length design project carried out in groups. A brief report of your group activities are to be handed in each week that includes specific information as detailed in the [webpage on groupwork](#). The project description (including check-ins and deliverables) is detailed in the [webpage on the project](#).

6. b Technology use and breakdown assignment

This assignment involves carrying out and writing up a contextual inquiry on another person's experiences using software. It is detailed on a separate ["technology use and breakdown" webpage](#).

6. c Hall of Fame and Shame

For only those students enrolled in TCSS 552, this assignment involves finding and analysing one example each of an excellent and a poor website or software application using the principles that we are studying in class. There are three due dates associated with this assignment. Details are given in the [Hall of Fame & Shame webpage](#).

7. GRADING

Unless otherwise specified, each assignment will receive an integer score between 0 and 4, inclusive. Your grade on each assignment will be a weighted sum of the grade on each part. Your final grade for the course will be calculated by taking the weighted sum of grades on all work that you have handed in, and rounding to the closest 1/10th. That is, multiply each score that you receive by the weight of the assignment, add these together, then round to the nearest 0.1. The correspondence between numeric grades and letter grades (i.e., A, B, C, etc.) is the standard one that UW uses: 4 is an A, 3 is a B, 2 is a C, 1 is a D, and 0 is an E/F. For additional details, see UW Student Governance and Policies, Chapter 110, <http://www.washington.edu/admin/rules/policies/SGP/ScholRegCH110.html>

8. USE OF ELECTRONIC DEVICES

Laptops may be used in class only to carry out course-related work. Please take phone calls (texting, checking message, ...) outside the class.

9. PLAGIARISM

This class will heavily involve the use of the written works of others. Your own written work will involve discussing the ideas of others. When using the ideas of others, it is important to acknowledge whose ideas you are using, and to clearly distinguish the ideas of others from your own. To convey the impression, whether inadvertently or deliberately, that another's work is your own, is called plagiarism. Plagiarism is a serious offense in the university. I have written a guideline on plagiarism and how to avoid it (<http://faculty.washington.edu/jtenenbg/courses/general/plagiarism.html>), and I expect that you will abide by it. Although this guideline is geared toward the use of other's computer programs, it applies equally well to other kinds of text.

10. CLASS EMAIL LIST

I have established a course mailing list for course-related discussion, to which everyone in the class will be a member. The email list name is tcss452a_wi13@uw.edu.

11. CAMPUS SERVICES

There are a number of campus services that are available to you as students, including information about inclement weather and the closing of campus, disability support, counselling, the library, and the teaching and learning center. Please see the service statements page for additional information at <http://www.tacoma.uw.edu/faculty-assembly/curriculum-committee> (you will need to scroll down for the links to the service statements).