

# INF 385G: ADVANCED USABILITY

## Syllabus

Last updated: 1/23/2017

**Unique Number:** 27972

**Semester:** Spring, 2017

**Professor:** Randolph G. Bias, Ph.D., CHFP  
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**Office:** UTA 5.424

**Office Hours:** Wednesdays, 1:00 – 2:00 p.m., and by appointment.  
(MOSTLY by appointment!!)

**Class Time:** Monday, 3:00 – 6:00 p.m.

**Classroom:** UTA 1.502

**Textbook:** Bias, R. G., & Mayhew, D. J. (Eds.) (2005). *Cost-justifying usability: An update for the Internet age, 2<sup>nd</sup> edition*. San Francisco: Morgan Kaufmann.

(Don't buy this – I will put a copy on reserve.)

### Synopsis:

This class is designed to help students gain a professional level of expertise in usability engineering methods. It has as a prerequisite the School of Information class in Intro to Usability, or equivalent (to be assessed by the professor). This class will build upon the earlier usability class.

### Objectives:

This class is designed to help you if you:

- intend to become a usability engineer, UX professional, or information architect, or think that you might.
- wish to gain confidence in your ability to maximize the usability of any human-computer interface or Web site that you end up designing, in your career.

- anticipate being the advocate for user-centered design in whatever organization you end up working in.
- wish to be one of the (few!) people educated in usability, “the next competitive frontier.”
- wish to bolster your portfolio.

### **Instructional Techniques:**

The course will entail various instructional techniques:

- 1 – lecture
- 2 – demonstration
- 3 – self-instruction, with question-answering by the professor
- 4 – attention to the real world
- 5 – dealing with stakeholders
- 6 – individual project.

### **Expectations:**

Expect to carry out one industrial-strength usability evaluation of a web site or a traditional user interface. Expect to be evaluated on the basis of the excellence of your written and oral presentation of that individual project, and your class participation. Expect to come out of the course with confidence in your own ability to conduct a usability evaluation. Expect to come to view all design as incomplete unless the user is considered.

### **Policies:**

#### **Grades:**

Your grade will be based on four things:

- 1 – Class participation (20%)
- 2 – White paper on some topic of interest (20%)
- 2 – Presentation of the usability test plan (30%)
- 4 – Final, written report of the usability evaluation (30%)

#### **Late Assignments:**

Your grade will be docked one grade per day late, for your written assignment.

#### **Attendance:**

It matters. When you aren't here, you deprive your classmates of your shared wisdom.

### **Some Important Meta-points:**

**Course Prerequisites** - None

**UT-Austin Honor Code**

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

### **Plagiarism**

Plagiarism, as defined in the 1995 *Random House Compact Unabridged Dictionary*, is the "use or close imitation of the language and thoughts of another author and the representation of them as one's own original work." Within academia, plagiarism by students, professors, or researchers is considered academic dishonesty or academic fraud and offenders are subject to academic censure, up to and including expulsion. There, you see – I just did it myself! I copied those two sentences right off of Wikipedia and didn't give credit. Here's the citation: Plagiarism (2010). Wikipedia, <http://en.wikipedia.org/wiki/Plagiarism>. Web site accessed 1/13/2010. If you use words or ideas that are not your own you must cite your sources. Otherwise you will be guilty of plagiarism. Here's a resource designed to help you avoid plagiarism: [www.lib.utexas.edu/plagiarism](http://www.lib.utexas.edu/plagiarism).

### **Cheating**

Don't. Dire consequences. We've already talked about plagiarism. Don't cheat on tests, either. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University.

### **Late Assignments**

Your grade will be docked one grade per day late, for any assignment. As for make-up exams, I will truly hate to have to create a second exam. But if you're sick, or have some other good excuse, please call me in advance.

### **Attendance**

Attendance matters. Make sure you sign in on the attendance sheet every day. When you aren't here, you deprive your classmates of your shared wisdom. Your attendance will be considered in your overall "participation" grade.

### **Religious Holy Days**

By UT Austin policy, you must notify me of your pending absence at least 14 days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

### **Disabilities**

Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Services for Students with Disabilities area of the Office of the Dean of Students at 471-6259 (voice) or 471-4641 (TTY for users who are deaf or

hard of hearing) as soon as possible to request an official letter outlining authorized accommodations.

### **In Case of an Emergency**

The following are recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/> :

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors.
- Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Behavior Concerns Advice Line (BCAL): 512-232-5050
- Link to information regarding emergency evacuation routes and emergency procedures can be found at: [www.utexas.edu/emergency](http://www.utexas.edu/emergency)

### **Cell phones and computers**

Here's the deal on cell phones. If you have kids, you get to leave your cell phone on. If you don't have kids, therefore, you get to leave you cell phone on, too. But please leave it on vibrate, and leave the room if you need to take a call or respond to a text message.

Your fellow students can be distracted by your laptop screen. Please use laptops only for taking notes or looking up information relevant to the topic at hand.

I am going to START the semester with no explicit punishment associated with this guideline, but will retain the right to impose some stricter sanctions if it becomes a problem. Please just follow the rule.

### **Some University Deadlines**

Last day to drop for possible refund – Feb. 1.

Final class day – December 5. There will be no final exam for this course.

## Your Questions and General Level of Comfort

If you have a question, please ask. I will be very receptive to emails at any time, and phone calls before 10:00 p.m. If it is important, I'll be receptive to phone calls at any hour.

### Schedule:

Date	Day	Topics	Assignment (due BEFORE class)
1/23	1	- Introduction - Once around the room - Once again around the room - Syllabus review - Discussion of possible projects.	
1/30	2	- Decide on projects	Each student come to class prepared to discuss the meta-findings from your earlier usability activities: surprises, lessons learned, etc. Five minutes each. Supporting ppt optional.
2/6	3	No class. Work on making contact with your primary stakeholders.	- Have read some of Bias and Mayhew (2005).
2/13	4	Informal discussion of white papers.	White paper due.
2/20	5	Class optional. Be finishing test plans.	
2/27	6	Class optional. Be finishing test plans.	
3/6	7	Presentation of test plans	
3/20	8	Usability testing workshop. (PERHAPS some make-up test plan presentations.)	
3/27	9	Usability testing workshop	
3/31			Deadline for submitting Open House abstract.
4/3	10	Usability testing workshop	
4/10	11	Usability testing workshop	
4/17	12	Usability testing workshop	
4/24	13	Usability testing workshop	
5/1	14	Last class. Informal discussion of test results.	Final test reports due (digital and printed copies, please)
5/5		Participate in the Spring Open House. (Optional.)	

## **SOME potential white paper topics:**

- The ethics of some social networking site's actions (e.g., Facebook, OKCupid).
- Unmoderated usability testing tools/methods/sites
- Automated usability testing
- Usability of pen interfaces
- Accessibility
- Usability engineering of user documentation
- Usability and training
- Usability and internationalization
- Organizational challenges for usability
- Wireless usability
- Usability and kids
- Usability for an aging population
- Usability and health care
- Special concerns for e-commerce
- Gaming interfaces
- Cost-justifying usability: Measuring return-on-investment for your usability engineering dollar and hour
- Color and culture
- Motion perception
- Remote usability testing
- Web UI standards
- Scientific comparisons of the effectiveness of various usability engineering methods
- Usability vs. learnability vs. discoverability
- I REALLY want someone to take this: The usability of pen interfaces
- Usability and video interfaces
- What's new on the usability horizon?

## **Usability Evaluation Project**

Conduct an “industrial-strength” usability evaluation of some software product or web site. By “industrial strength” I mean I expect this piece of work to be as good as it would be if you were being paid to do this work by a client. Include user testing; inspection methods can be used, but not exclusively. (One key aspect of “industrial strength” is that you need to test representative users, not just a convenience sample, as you may have in Intro to Usability.) Present the test plan, in class, and get feedback from your professor and peers. Present the evaluation in the form of both a final written report and (optionally) a poster at the Spring Showcase.

You are free to pick (with my approval) some web site, web-based app, mobile app, traditional desktop app, or other artifact, to evaluate. For those of you who don't have a particular project in mind, I will offer some possible projects in class on Day 1. Some things to consider as you choose, I offer humbly, are:

- Do I have the right skill set for this project?
- Will I enjoy this and be proud to have done this work?
- Might this piece of work look good on my resume?
- Relatedly, might this work help me land a job, either directly or indirectly?
- Will I be able to finish on time?!

NOTE: In the past I have always required that this be an individual project. Given the size of the class this semester, I MIGHT allow you to pair up to do a project, IF we can clearly specify that there is some part that you will each “own.”

### **SOME Potential Usability Projects . . .**

Will be presented on Day 1. You will also be invited to propose your own.

### **Spring Open House**

The iSchool’s Open House (May 5, 2017, 1-4pm) is an optional opportunity to present, showcase, and demo student projects, including projects from this course, to hundreds of visitors (interested in the cutting edge work at the school. Students interested in presenting projects will need to submit a brief 1-2 paragraph proposal by March 31, 2017 (look out for the deadline and upload link via email lists). These proposals will be submitted online and the link will be provided later.

Proposals should cover the following elements: 1) A clearly stated objective and an overall description of the work to be performed or demonstrated; 2) The deliverables, outcomes or the expected culminating products and the methods you will employ to achieve these outcomes; and 3) An explanation of how the project fits into your education (learning objectives) and professional goals.

Proposals are subject to review by the Open House Committee to ensure a professional quality presentation. You will have an opportunity to withdraw your proposal by April 21 if you don’t think the project will be ready in time.

Student projects may be displayed at the Open House in a wide variety of formats (iPads, laptops, screens, physical objects, art – posters are NOT required). Students should plan to have enough power to run their technology for the three hours of the exhibition. A limited number of outlets will be available and students will request all technical needs when they submit project proposals (by March 31). Remember to talk with the IT Lab about borrowing equipment early on and reserve any equipment you need in advance.