

## INF 385G – Advanced Usability

### Syllabus

- Unique Number:** 25855
- Semester:** Fall, 2005
- Professor:** Randolph G. Bias, Ph.D., CHFP  
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- Office:** SZB 562BB
- Office Hours:** Thursdays, 1:00 p.m. – 2:00 p.m.  
And by appointment.
- Class Time:** Thursday, 3:00 p.m. – 6:00 p.m.
- Classroom:** SZB 546
- TA:** Kelly Delevan  
[kdelevan@ischool.utexas.edu](mailto:kdelevan@ischool.utexas.edu)
- 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.
  - \* Ordered by the Co-op.
- Additional readings will be put on reserve in the ISchool IT lab.

### 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.

Advanced topics we MAY address include:

1. Remote usability testing.
2. Automated usability test tools.
3. Web UI standards.
4. Advocating for your data and your discipline.
5. Usability evaluation of systems for sophisticated users.
6. The politics of usability, and organizational placement of usability engineers.
7. How are Web UIs different from Windows UIs, and how SHOULD they be?
8. How does usability dovetail with accessibility and internationalization?
9. Measuring ROI for your usability dollar and hour.
10. Scientific comparisons of the effectiveness of various usability test and inspection methods.

11. Usability vs. learnability vs. discoverability.
12. Special needs of e-commerce sites vs. informational or Intranet sites.
13. What's new on the usability horizon?

### **Objectives:**

This class is designed to help you if you:

- intend to become a usability engineer, 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."

### **Instructional Techniques:**

The course will entail various instructional techniques:

- 1 – lecture
- 2 – demonstration
- 3 – student-directed discussion
- 4 – group exercise
- 5 – self-instruction, with question-answering by the professor
- 6 – attention to the real world
- 7 – individual project.

### **Expectations:**

Expect to become an expert on one subtopic of usability, and lead a class discussion on that topic. (It will be the responsibility of the student to identify, at least a week before the discussion [and with the help of the instructor] a set of readings for the class to read, to come to class prepared to summarize the readings, and to lead the class discussion on the subject.) 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 (25%)
- 2 – The class session you lead (excellence of preparation, excellence of presentation, excellence of leading the class discussion) (15%)
- 3 – Presentation of the usability evaluation (30%)
- 4 – Final, written report of the usability evaluation (30%)

#### **Cheating:**

Don't. Dire consequences.

#### **Late Assignments:**

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

**Etc.:**

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

**Schedule:**

<b>Date</b>	<b>Day</b>	<b>Topics</b>	<b>Assignment (due BEFORE class)</b>
<b>Th, 9/1</b>	1	- Introduction - Once around the room - Syllabus review - Where does usability fit in the world of information science? - Decide on which chapters to "own," for class discussion. - Surprise guest!	
<b>Th, 9/8</b>	2	- The IRB process - Cost-justifying usability, the general framework	- <i>Have read, before class starts:</i> -- Bias and Mayhew, Ch. 1 – 6 - Decide on the subject of your usability evaluation (product, Web site)
<b>Th, 9/15</b>	3	- Cost-justifying usability, how and why	- <i>Have read, before class starts:</i> -- Bias and Mayhew, Ch. 7 – 13 - Have IRB forms submitted.
<b>Th, 9/22</b>	4	- Cost-justifying usability, continued	- <i>Have read, before class starts:</i> -- Bias and Mayhew, Ch. 14-22
<b>Th, 9/29</b>	5	No class. Bias at HFES conference.	
<b>Th, 10/6</b>	6	Discussion of test plans	- Test plans due
<b>Th, 10/13</b>	7	Usability testing workshop	
<b>Th, 10/20</b>	8	Usability testing workshop	
<b>Th, 10/27</b>	9	Usability testing workshop	
<b>Th, 11/3</b>	10	Usability testing workshop	
<b>Th, 11/10</b>	11	Usability testing workshop	

<b>Th, 11/17</b>	12	Final oral presentations	- Written usability evaluation final reports due.
<b>Th, 12/1</b>	13	Final oral presentations	
<b>Th, 12/8</b>	14	Final oral presentations	

### **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 convenient sample, as you may have in Intro to Usability.) Get the human testing approved by the UT IRB. Get the test plan approved, in advance, by your professor. Present the evaluation in the form of both a final written report and an oral presentation to the class. More details on the project as we make progress in the class.