ISTM_4215_Fall 2016

Instructor Information

Dr. Mary Granger
Professor School of Business
The George Washington University
granger@gwu.edu
Funger 515
Office: 202-994-7159

Communication Policy

Email - Email received will be responded to within 24 hours, unless notified otherwise.
Campus Office Hours: Monday and Wednesday, 1 pm – 3 PM, and by appointment (send email)
Assignments will be returned within a week.

Biography

Research Interests: Database design, Human Computer Communications, curriculum development

Why do you want to know about Human-Computer Interaction?

What is usability? How do you define ‘user-friendly’ usability and design? Is there a design that is accepted and used, by everyone regardless of culture, age or disabilities? Should humans be forced to adapt to a machine or should a machine adapt to the human? Do you blame yourself when something (in technology or the real-world) does not meet your usability expectations? Who should take the responsibility for unusability (uselessness)? Since machines were first developed, usability issues caused concerns about safety, productivity, satisfaction and enjoyment. However, humans must still adapt to the machine.

Should usability be built in during design, not as an after-thought? How does usability become part of the building and creating of the technology or real-world artifact? You want to start thinking beyond the computer interface, to explore usability for many different types of users, for many different types of tasks and many different levels of expertise. How can you make lives better through technology? Can you define new and effective ways for humans to interact with electronic devices and improve their digital experience?
Disclaimer:

This course is not a web-design course. This is not a typical technology course: technology takes a back seat to people. Whatever your background, this course is for you! My major goal is for you to create an appreciation for usability and communication issues with computers and other machines that impact our lives. Never settle for unusalbity again!

What will you learn?

There are three goals that you will reach in this class. You will

1. Develop an understanding of the importance of usability
   a. Learn the history and background of the field
   b. Learn about users and their differences
   c. Learn models of usability
2. Integrate a process to create a usable prototype
   a. Apply Task-centered Design building your prototype
   b. Apply models to build and assess your prototype
   c. Communicate and collaborate with users
      i. Obtain and incorporate feedback from users
3. Identify and critique usability
   a. Apply models of usability
   b. Evaluate usability
      i. In current designs
      ii. In future designs
   c. Be aware of and appreciate differences in users

Assessment and Evaluation:

Short Papers: 8 papers – 5% each

There is no textbook for this class, however, there are many articles identified that you will need to read in order to become familiar the importance of usability. Based on these articles and class discussion, you will write a brief, one page critique. You must NOT summarize the article; instead incorporate your thoughts, suggestions and any additional research that you may find interesting. Read the description of the assignment carefully: the focus of each short paper is different. All the questions and topics are detailed under Assignments.

Project: 40%

In order for you to understand a process for developing a usable prototype, you will develop one. There are 3 major deliverables for the project. Initially, you will present your preliminary ideas in class. Once
you refine your topic you will prepare a report of the selected topic with background information about the needs, and interviews with either current or potential users. You are responsible for finding these users and interviewing them. Your second deliverable is composed of two parts: presentation and evaluation of a paper prototype, and report of the feedback and modifications that resulted from that evaluation. Your third deliverable is the presentation of your prototype and final report of the interface. Your incorporation of task analysis and some ideas from usability models will enable you to create a usable prototype.

Final Paper: 20%

As you review on of your peer’s project, you will be able to practice and demonstrate your assessment skills. You just bought the product for one of the developed prototypes. Your final deliverable enables you to integrate all the course material into an evaluation of another team’s usability prototype. You will be able to explore the prototype of your choice and go in-depth in your paper. This is a chance for you to have some fun as a ‘user’ and appreciate some of the issues that arise with usability development.