Educate. Innovate. Inspire.

SE-321 Human Computer Interaction

Professor: Zane Harvey

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Office Hours: Monday 6 – 7:30 PM ET

Dates/Times: Monday 7:45 – 10:25 PM ET

All Meetings are Live online in Canvas.

Fall 2017

Course Description:

In this course we will investigate the relationship between the functionality and usability of computer systems in order to maximize their efficiency by selecting appropriate input-output devices and interaction styles. Characteristics of the technology such a keyboards, mice, pens, video, computer speech and graphical interfaces will be considered. Characteristics of the users, such as age, dexterity and experience, derived by more general considerations of human psychology, sociology and anthropology.

Time and Locations

Synchronous lessons will be online on Monday evenings 7:45 – 10:25 PM ET.

Course Materials/Books:

User Interface Design and Evaluation:
Debbie Stone, Caroline Jarrett, Mark Woodroffe, Shailey Minocha

Course Content

Goals/ Objectives, the abbreviated goals and objectives
for this course are:

1. To learn and understand the techniques for gathering the requirements of a system.
2. To learn and understand how to identify the users of a system.
3. To learn and understand how to identify tasks and the work environment.
4. To learn and understand guiding principles for user interface design.
5. To learn and understand how to prototype a user interface.
6. To learn and understand various interaction designs and styles.
7. To learn and understand how to choose hardware and software components.
8. To learn and understand how to design user interfaces using GUIs, for the web and for embedded systems.
9. To learn and understand how to plan and perform evaluations of the user interfaces.

Upon completion of this course, it is expected that the student will be able to:

1. Develop a plan for gathering requirements for a computer system.
2. Identify target users, tasks and work environment for a computer system.
3. Design a user interface for the web, a GUI, or for an embedded system by applying principles of interface design.
4. Plan and perform testing of an interface.

Course Schedule

August 21: Course overview/ Syllabus presentation
Homework assignments = 3
Group Project = 1
August 28: Chapters 1, 2, 3
Introduction to HCI, Techniques for gathering requirements; Identifying the user
September 4: LABOR DAY, NO CLASS
September 11: Chapters 4, 5
Identifying tasks and the work environment; Principles for user interface design
HW Assignment #1 due
September 18: Chapters 6, 8
Requirements specifications and prototyping

September 25: Chapter 9
Requirements specifications and prototyping
October 2: Chapters 10, 11
Interaction Design; Interaction Style
HW Assignment #2 due
October 9: Chapters 12, 13
Choosing Hardware and Software Components
Group Project Part I Due
October 16: Exam I
October 23: Chapters 14, 16
Layout Principles; Designing a GUI
HW Assignment #3 due
October 30: Chapter 17
Designing for the Web
Group Project = 2
November 6: Chapter 18
Designing for Embedded Systems and Small Devices
November 13: Chapter 20, 21, 22, 23
Evaluation Strategy and Planning
Group Project = 3
November 20: EXAM II
November 27: Chapters 24, 25
Heuristic Evaluations, Variations
Group Project = 4
December 4:
Group Project Presentations
December 11: FINAL EXAM

Grading

Homework 19%
Group Project 19%
Class Participation 3%
Exam 1 19%
Exam 2 20%
Final Exam 20%
Total 100%

Course Requirements

Prerequisite: A "C" or better in CS-220.

Participation

Attendance for class is tracked in Canvas.

Group Project

One group project will evolve out of the homework assignments. It will involve designing an interface for an application, including determining user needs and requirements, creating a prototype, interviewing users, and testing user experiences. You may develop the project in HTML, Java, or another language of your choice.

Exams

- Tests and the final exam are open book.
- Make-up exams will not be given unless you have an exceptional excuse. You must notify me before the test is given if you are unable to take the

Communication

Emails, phone calls, text. Canvas Appointments are suggested. Course announcements will be used frequently to communicate with the class.

Academic Integrity

Every Student is expected to be familiar with Capitol Technology University's Code of Academic Conduct including (but not limited to) the issues of cheating, plagiarism, etc. All cases of suspected academic dishonesty will be reported to the appropriate school officials, and disciplinary action may result, following investigation by a judiciary committee. Some of the core concepts are given here:

DEFINITION AND EXPECTATIONS OF ACADEMIC INTEGRITY:

Cheating – intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise. Examples include, but are not limited to, submitting another student's work as your own, using books or notes during closed book tests.

Fabrication – intentional and unauthorized falsification or invention of any information or citation in an academic exercise. Examples include, but are not limited to, changing collected data to meet the hypothesis, listing a research source that does not exist, listing a quote that does not exist.
Facilitating academic dishonesty – intentionally or knowingly helping or attempting to help another to violate any provision of this code. Examples include, but are not limited to, giving any individual other than the professor your completed assignment, suggesting ways to cheat or plagiarize.
Plagiarism – The Technology University plagiarism policy may be found online at http://www.captechu.edu/resources/lib/writingguide/plagarism.html
Self-Plagiarism – submitting the same paper or assignment for more than one class for a grade without the professor's knowledge or permission.
Complicity – failing to report the incidents of academic dishonesty to the professor, department chair, Dean of Academic Affairs, or the Vice President for Academic Affairs.
Code of Conduct – the academic integrity code is incorporated into the Capitol Technology University's Code of Conduct Standards.
Judicial Process

Any incidents should be reported to the appropriate Department Chair with written documentation. The Department Chair will forward academic integrity cases to the Academic Affairs Council for review and all other incidents to the Dean of Students. Once the case is reviewed, the Judicial Facilitator, Dean of Students or designee, will meet with the student to discuss the allegations. The student will have the opportunity to accept responsibility and sanctions or to have the case heard by a Conduct Review Panel (CRP). If a CRP is needed, the student and all other faculty, staff or students who have direct knowledge of the incident will be asked to participate in a hearing. The CRP is composed of three members who are selected by the Judicial Facilitator from a pool of faculty, staff, or students. In cases of potential violations of the Academic Integrity Code, the CRP is generally composed of faculty members. The CRP will determine if it is more likely than not that the campus policies have been violated. If the CRP finds that the policies have been violated, they will recommend sanctions. The Judicial Facilitator will notify the student in writing of the CRP's findings. The student has the opportunity to appeal to the VP for Academic Affairs.

To learn more about the official policies of the university on this issue, please read "Code of Academic Integrity" beginning on page 18 and "Sanctions for Violations of Regulations" beginning on page 63 of the Student Handbook. The Student Handbook can be downloaded from:
http://www.captechu.edu/current-students/undergraduate/academic-resources

The contents of this syllabus or the scheduled contained herein can be modified at any time without notice.by the Professor.