

Northeastern University
School of Professional & Continuing Studies
IT 4255 Human-Computer Interaction

Human-Computer Interaction
IT 4255 / 3 q.h.

June 25 - August 15
Boston W 5:45 PM-8:45 PM

Summer 2007

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www.Reliable-Computer.com

Course Description

The course surveys human-computer interaction concepts, theory, and practice, focusing on its interdisciplinary nature. It describes the principles of human-computer interaction and the practice of user interface design. It also discusses the major human information processing sub-systems (perception, memory, attention, and problem-solving) and introduces usability metrics and evaluation methods

Text

Human-Computer Interaction. 3rd Edition. Prentice Hall, 2004 Alan Dix, Janet Finlay, Gregory D. Abowd, and Russell Beale ISBN-10: 0130461091 or ISBN-13: 9780130461094

Writing Skills:

While the principal goal of this course is the acquisition of knowledge in the subject area, students should be aware that University College requires that clear and effective writing be an integral part of the learning process.

Grading

Class Participation	20%
Mid Term Exam	30%
Final Project	50%

Laboratory Projects

- Evaluate and compare a University Web site versus a Commercial Site - written evaluation.
- Design (on paper) a complex product suitable for use by computer novices and the elderly. Design the user interface for major application and program a "story-board" prototype to illustrate its user interface. Prepare a complete plan for a usability evaluation of the interface. Present this work to the class. and prototype system in Access or Visio (group project) .

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Date	Review for class	Assignments Due on this Date
06/27/2007	Introduction: Chapter 1 <i>The Human - How information is inputted, processed and outputted.</i> Chapter 2 <i>The Computer – How its various elements affect interaction</i>	Chapter 1 The Human Chapter 2 The Computer
07/04/2007	Holiday	
07/11/2007	Chapter 21 <i>Hypertext, Multimedia And The World-Wide Web</i> <i>Understanding hypertext, finding things, web technology and web content</i> Chapter 3 <i>The Interaction</i> <i>Interaction models, ergonomics, interaction styles, and context</i> Chapter 4 <i>Paradigms</i> <i>Understanding HCI history is largely about understanding a series of paradigm shifts</i>	Chapter 21 Hypertext, Multimedia And The World-Wide Web Chapter 3 The Interaction Chapter 4 Paradigms
07/18/2007	Chapter 5 <i>Interactive Design Basics</i> <i>Design, the design process, users, scenarios, and navigation</i> Chapter 15 <i>Task Analysis</i> <i>Methods to analyze people's jobs, what people do, what things they work with and what they must know</i>	Chapter 5 Interactive Design Basics Chapter 15 Task Analysis
07/25/2007	Chapter 6 <i>HCI in the Software Process</i> <i>Software engineering and the design process for interactive systems, usability engineering, iterative design and prototyping and design rationale</i> Chapter 16 <i>Dialogue Notations And Design</i> <i>Conversation between two or more parties in user interfaces and levels</i> Mid-Term	Chapter 6 HCI in the Software Process Chapter 16 Dialogue Notations And Design
08/01/2007	Chapter 7 <i>Design Rules</i> <i>Designing for maximum usability, principles of usability, standards and guidelines and design patterns</i> Chapter 18 <i>Modelling Rich Interaction</i> <i>Status–event analysis, rich environments in task analysis and sensor-based systems</i>	Chapter 7 Design Rules Chapter 18 Modelling Rich Interaction

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08/08/2007	<p>Chapter 8 Implementation Support <i>Programming tools, windowing systems,, programming the application and control of dialogue, interaction toolkits and user interface management systems</i></p> <p>Chapter 10 Universal design <i>Equitable use, flexibility in use and simple and intuitive to use</i></p>	<p>Chapter 8 Implementation Support Chapter 10 Universal Design</p>
08/15/2007	<p>Chapter 11 User Support <i>Issues, types of user support which is provided by help and documentation</i></p> <p>Chapter 14 Communication And Collaboration Models <i>All computer systems have group impact and ignoring this leads to the failure of systems</i></p> <p>Final Presentation</p>	<p>Chapter 11 User Support Chapter 14 Communication and Collaboration Models</p>

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Student Questionnaire

STUDENT SURVEY

Name:

Address:

Phone:

Email:

Briefly describe your experience with computers. Do you own one?

Briefly describe your work history.

What are your course objectives? What are your hobbies/interests?

What types of applications software are you familiar with?

What is your current or intended major?