



Human Computer Interaction

Prof. Jongwook Woo, California State University Los Angeles

SHORT COURSE DESCRIPTION

This course covers the basic concepts, fundamental theories and current researches in human-computer interaction. Topics include principles, theories, methodologies, design, implementation, evaluation and research in computer interfaces. The objectives of this course are:

- to understand what HCI is and where it came from.
- to familiarize students with basic concepts of human computer interaction;
- to understand the difference between HCI and similar fields like UI design, UX design, Human Factors engineering.
- to introduce students to theories and principles in computer interface design;
- to understand that HCI involves twin disciplines: industry and research.
- to understand some of the basics of design thinking.
- to develop students' ability to design, conduct and analyze user studies for computer software; and
- to provide students with the knowledge of the design process for user interfaces.

READING MATERIALS

Recommended Textbook: Interaction Design - Beyond Human-Computer Interaction (4th edition), by Rogers, Sharp and Preece (ISBN 13: 978-1-119-02075-2)

- The textbook is not mandatory: You may choose to use the recommended textbook, or any other textbook in human computer interaction, or other online materials.
- The instructor's materials for lecture and assignment

COURSE REQUIREMENTS AND GRADING

Students are expected to attend every class session. Since Human Computer Interaction concepts are presented during class time, class attendance is essential for successful completion of assignments and tests. As a large part of the course involves work on practical assignment, it is essential that you utilize the time in class for discussion and exercises on the computer. If attendance is not possible for one of the class meetings, please contact the instructor beforehand. Students are expected to use the equipment of the computer assignments on campus if you do not have a personal computer nor internet.

SKKU regulations require students to attend at least 80% of all classes. All ISS classes are pass/fail based on the student academic achievement evaluated by grades on a scale of 100 points (grade of 60 or above is Pass).

Grading Policy:

- Class Activities (Pop quizzes, Attendance, Participation in Class):
10%
- Quiz/Lab/Homework Assignments:
30%
- Midterm Exam
25%
- Final Exam
35%

- Total 100%

TENTATIVE COURSE SCHEDULE

– WEEK I –

Monday (26 June)

Lecture 1: Course Overview with Syllabus; Conceptualizing Interfaces

Tuesday (27 June)

Lecture 2: Sensation and Perception
Quiz and Class Assignment

Wednesday (28 June)

Lecture 3: Sensation and Perception (cont.); Anthropometric Approach
Class Presentation

Thursday (29 June)

Lecture 4: Cognitive Approach
Quiz and Class Assignment

– WEEK II –

Monday (3 July)

Lecture 5: Cognitive Approach (cont.); Emotional Approach
Class Presentation

Tuesday (4 July)

Lecture 6: Interface Design Principles and Guidelines
Quiz and Class Assignment

Wednesday (5 July)

Lecture 7: HCI Academic Research – Research Ethics
Class Presentation

Thursday (6 July)

Midterm Exam by Lecture 7

– WEEK III –

Monday (10 July)

Lecture 8: HCI Academic Research – Research Methodology
Quiz and Class Assignment

Tuesday (11 July)

Lecture 9: HCI Academic Research – Data Analysis
Class Presentation

Wednesday (12 July)

Lecture 10: Design and Evaluation – Design Lifecycle
Quiz and Class Assignment

Thursday (13 July)

Lecture 11: Design and Evaluation – Establishing Requirements
Class Presentation

– WEEK IV –

Monday (17 July)

Lecture 12: Design and Evaluation – Design, Prototyping and Construction
Quiz and Class Assignment

Tuesday (18 July)

Lecture 13: Design and Evaluation – Evaluating Design
Class Presentation

Wednesday (19 July)

Final Exam