

Human-Computer Interaction

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Syllabus Outline

- Foundations of Human Computer Interaction:
Overview of Human Computer Interaction (HCI),
Human, Computer, Interaction
- Process of HCI Design
HCI Design Activities, User Modelling & Task Analysis,
Design Techniques, Prototyping, Evaluation
- HCI Design Examples:
Menu, Fill-Form, Icon, Web, Speech, New Design
Considerations & Directions

Course Intended Learning Outcomes

On successful completion of this course, you will

- Identify and recognize **fundamental aspects** of **HCI** and **interaction design process**
- Explain the importance of HCI
- Differentiate between a **good** or **bad design**
- Criticize and justify the **usability** of things used in daily life, particularly computer-related products, based on HCI **principles** and **guidelines**
- Generate design ideas and apply evaluation techniques, particularly in a mini-project

Teaching Pattern

| | Lecture + Discussion | Presentation | Mini-Project |
|------|----------------------|--------------|--------------|
| Week | LT-401 | LT-401 / TBA | P1406 |
| 1 | X | | |
| 2 | X | | |
| 3 | | | X |
| 4 | | | X |
| 5 | X | | |
| 6 | X | | |
| 7 | | X | |
| 8 | | X | |
| 9 | X | | |
| 10 | X | | |
| 11 | X | | |
| 12 | X | | |
| 13 | | X | |

Note:- L01, L02 and L61 students take laboratory/presentation sessions on Tuesday's morning, Wednesday's morning and Thursday's evening, respectively

Assessment

Coursework: 40%

- Assignments & Presentation: 8%
- Mini-Project & Presentation: 22%
- Test: 10%

Examination: 60%

Act of academic dishonesty (e.g., plagiarism, submission for assessment of material that is not your own work) will be liable to disciplinary actions

Assessment

More on Assignment Presentation on Week 7 or 8:

- Each student is required to make a short presentation regarding major findings of one investigated item in Q.2 of Assignment 1
- Take your own photos if possible

Assessment

More on Mini-Project:

- Final objective is to build an **interactive blog**
- Basic training is provided in Weeks 3 and 4 through **compulsory** laboratory sessions:
 - Week 3: XHTML, JavaScript, text-to-speech
 - Week 4: PHP, MySQL, phpMyAdmin
- Week 3: **Form group of 4** (within L01, L02, L61) **prior to receiving phpMyAdmin account**
- Week 10: **Prototyping** and **evaluation** of blog
- Week 13: **Presentation**
- You will help assessing blogs of other groups

Book List

Textbook:

1. J.Preece, Y.Roger and H.Sharp, *Interaction Design: Beyond Human-Computer Interaction*, Wiley (2007)

Supplementary:

2. S.Heim, *The Resonant Interface: HCI Foundations for Interaction Design*, Addison Wesley (2007)
3. D.D.McCracken and R.H.Wolfe, *User-Centered Website Development: A Human-Computer Interaction Approach*, Prentice-Hall (2004)
4. A.Dix *et al.*, *Human-Computer Interaction*, Prentice-Hall (2004)
5. D.Mayhew, *Principles and Guidelines in Software User Interface Design*, Prentice-Hall (1992)
6. B.Shneiderman and C.Plaisant, *Designing the User Interface*, Addison Wesley (2005)
7. D.Norman, *The Design of Everyday Things*, Doubleday (1990)

On-Line Resources:

Teaching Materials:

- <http://www.id-book.com>
- http://wps.aw.com/aw_heim_rinterface_1
- <http://www.hcibook.com/e3/>
- http://wps.aw.com/aw_shneider_dtui_4

XHTML, JavaScript, Text-to-Speech, PHP, MySQL

- <http://validator.w3.org>
- http://www.prenhall.com/mccracken_wolfe
- <http://www.springeronline.com/sgw/cda/frontpage/0,11855,3-40109-22-2277114-0,00.html>
- <http://www.microsoft.com/downloads>
- <http://www.w3schools.com/php/default.asp>
- <http://dev.mysql.com/doc/refman/5.0/en/>
- <http://www.w3schools.com/sql/default.asp>