

Human Computer Interactions *course*

This page contains syllabus, lecture slides, reading material, and exam for the course "Human Computer Interactions". Course code: MISM 625, MTech, [International School of Information Management](#), Mysore, India.

For any questions or comments regarding the lecture or this web site, please contact [Rajendra Akerkar](#).

Course Syllabus

Human Computer Interactions (HCI) is concerned with designing, evaluating and deploying usable, effective technologies in a range of contexts - be it home, office, school, cyberspace or other domain.

The objective of this course is to give an introduction to the key areas, approaches and developments in the field. The main objective is to get student to think constructively and analytically about how to design and evaluate interactive technologies. Basically, the course will introduce them to key areas, theoretical frameworks, approaches and major developments in HCI.

The **course outline**:

- Session 1 What is Interaction Design? (26 September)
- Session 2 Understanding and conceptualising interaction (27 September)
- Session 3 Understanding users (28 September)
- Session 4 The process of Interaction Design (29 September)
- Session 5 Establishing requirements (30 September)
- Session 6 Prototyping (1 October)
- Session 7 Evaluation (3 October)
- Session 8 Observing users (4 October)
- Session 9 Emerging Trends (5 October)
- Session 10 Student Group Presentations (7 October)
- Session 11 Student Group Presentations (8 October)

Learning outcomes:

After studying the course you will be able to:

Knowledge and understanding:

- explain why it is important to design interactive products that are usable
- define key terms used in interaction design

- explain key theories used in the design of interactive products
- explain the importance of iteration, evaluation and prototyping in interaction design

Cognitive skills:

- gather data in the context of developing a simple interactive product using suitable techniques
- produce a low-fidelity prototype for an interactive product based upon a simple list of interaction design principles.
- evaluate an interactive product using suitable techniques

Key skills:

- communicate effectively to peers and specialists about requirements, design, and evaluation activities relating to interactive products

Practical and/or professional skills:

- define a suitable programme of user involvement that treats users ethically and fairly.

Project, Presentation Topics and Lecture Slides

The course material will be available via [course management system](#).

Course Structure & Resources

This will be 2 weeks course. Each class session will be of 4 hour 30 min. duration. Classes will comprise of lecture, hands-on-practice, discussion etc. Students will be encouraged to participate in class-discussion and will make at least one presentation during the course. Morning sessions will mainly consist of lectures and group exercises. Afternoons will be focused mainly around assessment activities and personal study. Students are expected to organise their time to cover preparatory work and assessment activities.

The text for the course is *Interaction Design: Beyond Human-Computer Interaction*, second edition, by Sharp, Rogers and Preece. The publisher is John Wiley & Sons, 2007. The website accompanying the book is at <http://id-book.com>.

Journals that deal with Interaction Design issues include: [ACM Transactions on Computer-Human Interaction](#), [Human-Computer Interaction International Journal of Human-Computer Studies](#), [Behaviour & Information Technology](#)

The ACM Digital Library contains papers and articles from a wide range of conferences and journals that focus on Interaction Design, including the annual [ACM Conference on Computer-Human Interaction](#), usually referred to as CHI 200x.

Reading Material

- [Interaction](#) the BCS Specialist Group on Interaction
- The [Usability Professionals' Association](#) (UPA) - founded in US, with local chapters in the US and other countries
- Mikael Ericsson's listing of [research labs and projects world-wide](#)
- [Ubiquity](#) - ACM online magazine (general IT topics, but lots relevant to HCI)
- Alan's column and resources on [HCI Education](#) in SIGCHI Bulletin
- HCI International has a bi-monthly subscription newsletter partly about the conference, but also carrying general news, events, etc. back issues at their [Press Room](#)
- [Videos in User-System Interaction](#) - collated by [Matthias Rauterberg](#)
- [The HCI Bibliography](#) - free-access online bibliographic database on Human-Computer Interaction
- [HCI Resource Network](#) - event listings, links, jobs and subscription only sections, includes A-Z of HCI topics
- Hans de Graaff's [HCI Index](#)
- Craig Marion's [Software Design Smorgasbord](#)
- [Gary Perlman's Resources in HCI](#) columns from [Interactions](#)
- [University of Michigan](#) HCI resource links
- The [Usability First](#) web site has good collections of resources, particularly for web and accessibility
- Usability First [glossary](#) of usability terms
- [CHI recently completed theses list](#)
- [ComputingCases.org](#) a resource site for teaching ethical issues in computing
- [SAP Usability Glossary](#)

newsgroups

- [comp.human-factors](#)
- [comp.groupware](#)
- [comp.cog-eng](#)

Assignments/Exam

This course is assessed by coursework (50%) and online exam (50%). There are two types of coursework. The first is a Group Presentation. This is a 30-minute group talk by three students on a given topic using Powerpoint slides. The second is a Project Report.

ASSIGNMENT 1: GROUP PRESENTATION - 20%
You will give a group presentation: a 30-minute talk to be presented to your seminar group in second Week. The talk will be followed by 5 minutes for questions. The presentation represents 20% of the total marks for the HCI course.

ASSIGNMENT 2: PROJECT REPORT - 30%
The content of this project will be a report on a user-centred design process undertaken by yourself from a choice of 3 options, involving critiquing and redesigning a website. The report is to be handed in to the instructor by 23.00 on 23 October. The project report represents 30% of the total marks for the HCI course.

EXAMINATION - 50%
50% of the marks for the HCI course are allocated to an final exam which takes place

online through the course management system on 22 October. Advice on what the exam consists of and how to approach it will be given in the last session of the course.

Details about the end of semester exam will be available [here](#).

Marking & Grading

The candidate will be evaluated on a 10 point scale and the Grading pattern will be as follows:

Percentage	$96 \leq P \leq 100$	$90 \leq P \leq 89$	$80 \leq P \leq 79$	$70 \leq P \leq 69$	$60 \leq P \leq 59$	$55 \leq P \leq 54$	$50 \leq P \leq 49$	$40 \leq P \leq 39$	$31 \leq P \leq 30$	$00 \leq P \leq 29$
G	10	9	8	7	6	5	4	3	2	0

Specific criteria for judging the assignments will vary, but generally they will be judged on:

- knowledge of the literature and/or available information
- clarity of oral or written presentation
- originality of analysis or interpretation by the student or group
- appropriate application of the techniques used
- justification of design choices or value statements

