



MANIPAL INSTITUTE OF TECHNOLOGY

Manipal University, Manipal
Karnataka -576104

COURSE PLAN

Department : INFORMATION COMMUNICATION AND TECHNOLOGY
Course Name & code : HUMAN COMPUTER INTERACTION (ICT- 4010)
Semester & branch : VII SEM (CCE)
Name of the faculty : Ms. REENA SINGH
No of contact hours/week: 3

ASSESSMENT PLAN:

1. In Semester Assessments - 50 %

- Written tests : 30 marks (2 Tests of 15 marks each)
- Assignment/Quiz/
Seminar : 20 marks (3 Assignments - A1: 6 marks, A2: 6 marks and A3 (Group Work): 8 marks)

2. End Semester Examination - 50 %

- Written examination of 3 hours duration (Max. Marks: 50)

Portions for Assignment/Quiz/Seminar etc....	
Sl. no.	Topics/Lessons
1	L1 – L12
2	L13 – L28
3	L1 – L32
4	
5	
Portions for Sessional Test	
Test no.	Topics/Lessons
1	L1 – L12
2	L13 – L28

Course Outcomes (COs)

At the end of this course, the student should be able to:

		No. of Contact Hours	Program Outcomes (POs) addressed
CO1:	Understand the key components of an interactive system	4	
CO2:	Explain principles, guidelines and design representations used to specify usable, universally accessible interactive systems	12	
CO3:	Analyse and evaluate an interactive system to check if it satisfies user needs	12	
CO4:	Apply different models in interface design process	8	
CO5:			
CO6:			

Course Plan

L. No.	Topics	Course Outcome Addressed
L0	Introduction to HCI	-
L1	The Human-Input Output Channels, Human Memory, Thinking, Psychology and the design of interactive systems	CO1
L2	The Computer-Text entry devices, Positioning, pointing and drawing, Display devices	CO1
L3	Physical controls, sensors and special devices, Memory, Processing and networks	CO1
L4	Models of Interaction, HCI and framework, Ergonomics, Interaction Styles, The context of interaction	CO1
L5	The process of design	CO2
L6	User focus, Scenarios	CO2
L7	Navigation design, Screen design and layout	CO2
L8	Iteration and prototyping	CO2
L9	Principles to support usability	CO2
L 10	Standards, Guidelines	CO2
L11	Golden rules and heuristics	CO2
L12	HCI patterns	CO2

L. No.	Topics	Course Outcome Addressed
L 13	Organizational Design to Support Usability, The Four Pillars of Design	CO2
L 14	Development Methodologies, Ethnographic Observation	CO2
L 15	Participatory Design , Scenario Development	CO2
L16	Social Impact Statement for Early Design Review	CO2
L 17	Goals of evaluation	CO3
L18	Evaluation through expert analysis	CO3
L19	Evaluation through user participation	CO3
L 20	Choosing an evaluation method	CO3
L 21	Accessibility	CO3
L 22	Accessibility	CO3
L23	Interfaces for differently-aged population groups	CO3
L 24	Interfaces for differently-aged population groups	CO3
L25	Different types of interviews and questionnaires	CO3
L 26	Data collection and analysis, Questionnaire design	CO3
L27	Heuristic evaluation	CO3
L 28	Strengths and limitations of the techniques and selection of appropriate ones	CO3
L29	Goal and task hierarchies	CO4
L 30	Linguistic models, The challenge of display-based systems	CO4
L31	Physical and device models	CO4
L32	Cognitive architectures	CO4
L33	Organizational issues, Capturing requirements	CO4
L 34	Face-to-face communication	CO4
L 35	Conversation, Text-based communication	CO4
L 36	Group working	CO4

L. No.	Topics	Course Outcome Addressed

References:

1. Alan Dix, Janet E. Finlay, Gregory D. Abowd, and Russell Beale, Human-Computer Interactions, 3rd edition, Prentice Hall, 2003.
2. Ben Shneiderman, Catherine Plaisant, Maxine Cohen and Steven Jacobs, Designing the User Interface: Strategies for Effective Human-Computer Interaction, 5th edition, Addison-Wesley, 2009.
3. Jeffrey Rubin and Dana Chisnell. Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests. 2nd Edition. New York: Wiley, 2008.
4. Yvonne Rogers, Helen Sharp and Jenny Preece, Interaction Design: Beyond Human - Computer Interaction, 3rd Edition, Wiley, 2011.
- 5.
- 6.
- 7.

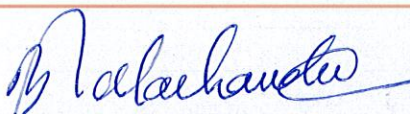
Submitted by: Ms. REENA SINGH



(Signature of the faculty)

Date: 01/08/2017

Approved by: DR. BALACHANDRA



(Signature of HOD)

Date: 1/8/17

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FACULTY MEMBERS TEACHING THE COURSE (IF MULTIPLE SECTIONS EXIST):

FACULTY	SECTION	FACULTY	SECTION
Ms. REENA SINGH	CCE A, CCE B		
