

1.	Course Title	Human-Computer Interaction		
2.	Course Code	CICT3513		
3.	Status	Faculty		
4.	Credit Hour	3 (2+1) 2 lecture (2 hours lecture x 14 weeks) 1 tutorials (1.5 hours per x 14 weeks)		
5.	Semester/Year	1/3		
6.	Prerequisites	CCPS1523 Object Oriented Programming		
7.	Teaching method:	Distance Learning (Electronic)		
8.	Evaluation	Assessment and Marking Percentage: Participation 5% Quizzes 15% Project 15% Mid Sem Exam 15% Final Examination 50%		
9.	Lecturer			
10.	Objective of the Subject	To introduce students the concept of Human-Computer Interaction, interaction design methodology, proper design of an interface, systematic methodologies for evaluating them and advanced issues in HCI and high speed networks.		
11.	Learning Outcomes	By the end of the subject, students should be able to: - Understand the concept of Human-Computer Interaction - Understand the process of interaction design - Apply the Human-Computer Interaction concepts to the current interaction design.		
12.	Synopsis	The course highlights human-computer interaction strategies from a number of perspectives including that of the engineer, cognitive psychologist, and end-user. Major themes include user centered design and evaluation of usable interfaces, matching computer systems with the cognitive capabilities of users, and an investigation of novel paradigms in human-computer interaction. The course will also focus on the lifecycle of interaction design methodology. Advanced HCI issues will also be introduced in this course.		
13.	Topics	Details	Lecture (Hrs)	Tutorial (Hrs)
	Week 1	Introduction to interaction design Introduction, good and poor design, interaction design, goals of interaction design and usability principles.	2	1.5
	Week 2	Understanding and conceptualising interaction Problem space, conceptual model, interface metaphors, interaction paradigms.	2	1.5
	Week 3	Understanding users and effects of interface to users. Cognition process, framework for cognition, mental model, information processing	2	1.5
	Week 4	Psychology aspects of the user, affective aspects, expressive interface, user frustration, virtual characters (agents).	2	1.5
	Week 5	Process of interaction design Interaction design activities and process, identify user needs and requirements, prototyping based on user centered approaches to interaction design (ethnography in design,	2	1.5
	Week 6	Alternative design, lifecycle models for interactive design and HCI, task description and analysis, interaction methods (menu, command, voice, graphical etc)	2	1.5
	Week 7	participatory design), evaluation framework, paradigm and techniques	2	1.5
	Week 8	Testing and modeling users (user testing, experiments, predictive models).	2	1.5

Bachelor of Information Technology in Management Information System (Hons)

	Week 9	Designing for collaboration and communication Social mechanism in communication and collaboration, CSCW (email, bulletin board, video conferences, virtual collaborative environment),	2	1.5
	Week 10	Groupware (time/space matrix, shared applications, synchronous and asynchronous groupware), designing collaborative technologies.	2	1.5
	Week 11	Advanced issues in HCI Multi-modal interaction, speech and gesture interaction, assistive technology,	2	1.5
	Week 12	interaction in the virtual world, biometrics in HCI, ubiquitous computing and HCI	2	1.5
	Week 13	intelligent user interface, information retrievals, hypertext and digital libraries (natural language	2	1.5
	Week 14	Information retrieval algorithms, information interface, hypertext, digital libraries).	2	1.5
		Total contact hours	28	21
		Equivalent lecture hours	28	14
		Total lecture hours	42	
		Credit hours	3	
14.	Main reference: Textbook:	Helen Sharp, Yvonne Rogers, and Jenny Preece, Interaction Design: Beyond Human-Computer Interaction (2007)		
15.	Additional References:	1. Andrew Sears and Julie A. Jacko, The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies and Emerging Applications, Second Edition (Human Factors and Ergonomics) (2007) 2. Ben Schneiderman, Designing the User Interface: Strategies for Effective Human-Computer Interaction, 4th Edition, Addison Wesley, 2004. 3. Alan Dix, Janet Finlay, Gregory Abowd, and Russel Beale, Human-Computer Interaction, 3rd Edition, Prentice Hall, 2004. 4. Jenny Preece, Human-Computer Interaction, Addison Wesley, 1994. 5. John M. Carroll, Human-Computer Interaction in the new millennium, Addison Wesley, 2001 All materials will be available to the students online.		
	Other Materials:			