

College of Computer Science and Information Systems
 Course Code : 328CSS-3
 Contact Hour : 3(0)

Department of Computer Science
 Human and Computer Interaction
 Prerequisite : N/A

Coordinator -

2. Course Description

Study of theoretical concepts of human-computer interaction (HCI), design principles for graphical computer interfaces, dimensions and multi-disciplinary nature of human computer interaction, user interface design, user requirements analysis, user modeling, task analysis, general principles in user interface design, principles, rules and models in human-centered design, design guidelines, standards and style guides, dialogue styles, ergonomics and human factors, usability, toolkits, development environments and user interface management systems, formative and summative evaluation, user interfaces for the web, enhanced human-computer interaction, and advanced issues in human-computer interaction, basic concepts of GUI Programming

3. Course Learning Outcomes

SL	By the end of this course, students should be able to:	Linkages to POs
1.	Define the theory of basic concepts of human computer interaction that concern human cognition, interfaces and interaction.	a(S)
2.	Describe basic task analysis (why task analysis is at the heart of nearly all HCI activities, using of task analysis in computing-related) and the rules and models of the human centered design in interactive software applications.	a(S)
3.	Analyze the general features of the graphical user interface from usability point of view	k(S)
4.	Design good user interfaces which are applicable to different user types.	b(S)
5.	Evaluate the environment and user interface management system	i(S)
6.	Determine the usability problems by developing model and graphical user interface through questionnaires.	c(S)
7.	Develop the GUI programming techniques to solve windows based applications/real world problems	i(S),k(S)

4. Learning Resources

Text	Diaper, Stanton, The Handbook Of Task Analysis For Human Computer Interaction
Text	Martin G. Helander, Thomas K. Landauer, Prasad V. Prabhu, Elsevier Handbook Of Human-Computer Interaction Elsevier
Text	PROGRAMMING IN VISUAL BASIC 2008 Julia Case Bradley, Anita C. Millsbaugh Copyright © 2009 by The McGraw-Hill(TB)
Reference	Human Computer Interaction, Panayiotis Zaphiris, Chee Siang Ang, Information Science Reference.
Reference	Visual Basic 2008, How To Program, P.J. Deitel and H.M. Deitel, Pearson International Edition, 2009(RB).

5. Course Content : The list below provides a summary of the material that will be covered during the course

Week	Topics	References Book / Others Source	Special Event	Tutorial Activities	Lab Activities
1.	Theoretical concepts of human-computer interaction (HCI).				
2.	Task analysis		Group Discussion		Lab Activity1,2 Introduction,Forms, Tex box,buttons And Labe

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5.	Ergonomics and human factors		Quiz 1		Lab Activity:3 List box,Combobox,Date time picker
6.	Human Centered Design		Midterm 1		Lab Activity :4 Numeric up &down,hscrollbar,vsco llbar,progres
7.	General Principles in interface design				Lab Activity:5 Create menu,Use several forms and calculation
8.	General Principles in interface design				Lab Activity:5 Create menu,Use several forms and calculation
9.	Development environments and user interface management systems, formative and summative evaluation		Quiz 2		Lab Activity:7 Play sound,play video ,play animation
10.	Design guidelines, standards and style guides, dialogue styles, and		Midterm 2		Lab Activity :8&9 Database Concepts
11.	Design guidelines, standards and style guides, dialogue styles, and		Midterm 2		Lab Activity :8&9 Database Concepts
12.	Usability: Principles, Evaluation		Assignment		Lab Activity:10 Database Concepts
13.	Usability: Principles, Evaluation		Assignment		Lab Activity:10 Database Concepts
14.	Usability Test Process, Web interfaces				

6. Evaluation Scheme: The following list is the contribution of course components to the final grade for the course.

Component	Weight (%)
Quizzes	10
Assignments	10
Midterm Examination 1	15
Midterm Examination 2	15
Lab Final Exam	10
Final Exam	40
Total	100

