MOHAMMED SATHAK A J COLLEGE OF ENGINEERING

Siruseri IT park, OMR, Chennai - 603103

LESSON PLAN

Department of Computer Science and Engineering

Name of the Subject	Human Computer Interaction	Name of the handling Faculty	Mr. Ashok Kumar
Subject Code	CS8079	Year / Sem	IV/VII
Acad Year	2022-23	Batch	2019-23

Course Objective

To learn the foundations of Human Computer Interaction

To become familiar with the design technologies for individuals and persons with disabilities

To be aware of mobile HCI.

To learn the guidelines for user interface.

Course Outcome

Design effective dialog for HCI

Design effective HCI for individuals and persons with disabilities

Assess the importance of user feedback.

Explain the HCI implications for designing multimedia/ ecommerce/ e-learning Web sites.

Develop meaningful user interface.

Lesson Plan

Sl. No.	Topic(s)	T / R* Book	Periods Required	Mode of Teaching (BB / PPT / NPTEL /	Blooms Level (L1-L6)	CO	PO
UNIT I -FOUNDATIONS OF HCI							
1	The Human: I/O channels	T	1	PPT	L1	1	1,2,3
2	Memory – Reasoning and problem solving	T	1	PPT	L2	1	1,2,3
3	The Computer: Devices	T	1	PPT	L2	1	1,2,3
4	Memory	T	1	PPT	L2	1	1,2,3
5	processing and networks;	T	1	PPT	L2	1	1,2,3
6	Interaction: Models – frameworks	T	1	PPT	L2	1	1,2,3
7	Ergonomics – styles	T	1	PPT	L2	1	1,2,3
8	elements – interactivity- Paradigms.	T	1	PPT	L2	1	1,2,3
9	Case Studies	T	1	PPT	L3	1	1,2,3
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method - MCQ							
UNIT II - DESIGN & SOFTWARE PROCESS							
10	Interactive Design: Basics	T	1	PPT	L2	2	1,2,3
11	process – scenarios	T	1	PPT	L2	2	1,2,3
12	navigation – screen design	T	1	PPT	L2	2	1,2,3
13	Iteration and prototyping.	T	1	PPT	L2	2	1,2,3
14	HCI in software process: Software life cycle	T	1	PPT	L2	2	1,2,3
15	Usability engineering	T	1	PPT	L2	2	1,2,3
16	Prototyping in practice – design rationale.	T	1	PPT	L2	2	1,2,3
17	Design rules: principles, standards, guidelines, rules.	T	1	PPT	L2	2	1,2,3
18	Evaluation Techniques – Universal Design	T	1	PPT	L3	2	1,2,3
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any - Assignment							
Evaluation method -Assignment							
UNIT III -MODELS AND THEORIES							
19	HCI Models	T	1	PPT	L2	3	1,2,3
20	Cognitive models	T	1	PPT	L2	3	1,2,3
21	Socio-Organizational issues and stakeholder	T	2	PPT	L2	3	1,2,3
22	Communication and collaboration models	T	2	PPT	L2	3	1,2,3
23	Hypertext, Multimedia and WWW.	T	3	PPT	L3	3	1,2,3
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any - Assignment							
Evaluation method - Assignment							

UNIT IV - MOBILE HCI							
24	Mobile Ecosystem: Platforms, Application frameworks	T	1	PPT	L1	4	1,2,3,12
25	Mobile Ecosystem: Platforms, Application frameworks	T	1	PPT	L2	4	1,2,3
26	Types of Mobile Applications: Widgets, Applications,	T	1	PPT	L2	4	1,2,3
27	Types of Mobile Applications: Widgets, Applications,	T	1	PPT	L2	4	1,2,3
28	Games- Mobile Information Architecture	T	1	PPT	L2	4	1,2,3
29	Mobile 2.0	T	1	PPT	L2	4	1,2,3
30	Mobile Design: Elements of Mobile Design,	T	1	PPT	L2	4	1,2,3
31	Tools	T	1	PPT	L2	4	1,2,3
32	Case Studies	T	1	PPT	L3	4	1,2,3
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any -							
Evaluation method -MCQ							
UNIT V - WEB INTERFACE DESIGN							
33	Designing Web Interfaces	T	1	PPT	L2	5	1,2,3
34	Drag & Drop	T	1	PPT	L2	5	1,2,3
35	Direct Selection	T	1	PPT	L2	5	1,2,3,4
36	Contextual Tools,	T	1	PPT	L2	5	1,2,3
37	Overlays	T	1	PPT	L2	5	1,2,3,4
38	Inlays and Virtual Pages	T	2	PPT	L2	5	1,2,3
39	Process Flow	T	1	PPT	L2	5	1,2,3
40	Case Studies	T	1	PPT	L3	5	1,2,3
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method -							
Content Beyond the Syllabus Planned							
1							
2							

Text Books	
1	Alan Dix, Janet Finlay, Gregory Abowd, Russell Beale, ―Human Computer Interaction‖, 3rd Edition, Pearson Education, 2004 (UNIT I, II & III)
	Brian Fling, ―Mobile Design and Development‖, First Edition, O‘Reilly Media Inc., 2009 (UNIT – IV)
2	Bill Scott and Theresa Neil, ―Designing Web Interfaces‖, First Edition, O‘Reilly, 2009. (UNIT-V)
Reference Books	
Website Reference	
1	https://nptel.ac.in/

Blooms Level					
Level 1 (L1) : Remembering	Lower Order Thinking	Fixed Hour Exams	**Level 4 (L4) : Analysing**		Higher Order Thinking / Projects / Mini Projects
Level 2 (L2) : Understanding			**Level 5 (L5) : Evaluating**		
Level 3 (L3) : Applying			**Level 6 (L6) : Creating**		

Mapping syllabus with Bloom's Taxonomy LOT and HOT

Unit No	Unit Name	L1	L2	L3	L4	L5	L6	LOT	HOT	Total
Unit 1	FOUNDATIONS OF HCI	1	8	0	0	0	0	9	0	9
Unit 2	DESIGN & SOFTWARE PROCESS	0	8	**1**	**0**	**0**	**0**	9	0	9
Unit 3	MODELS AND THEORIES	0	7	**2**	**0**	**0**	**0**	9	0	9

Unit 4	MOBILE HCI	1	8	**0**	**0**	**0**	**0**	9	0	9
Unit 5	WEB INTERFACE DESIGN	0	9	**0**	**0**	**0**	**0**	9	0	9
Total		2	40	3	0	0	0	45	0	45
Total Percentage		4.44	88.89	6.67	0	0	0	100	0	100

CO PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	2	1	0	0	0	0	0	0	0	0	0	3	2
CO2	3	2	1	0	0	0	0	0	0	0	0	0	3	2
CO3	3	2	1	0	0	0	0	0	0	0	0	0	3	2
CO4	3	2	1	0	0	0	0	0	0	0	0	1	3	2
CO5	3	2	1	1	0	0	0	0	0	0	0	0	3	2
Avg	3	2	1	0.2	0	0	0	0	0	0	0	0.2	3	2

Justification for CO-PO mapping

CO1	Designing an effective dialog for Human and Computer is a foundation of HCI
CO2	Designing an effective Humnan and Computer Interaction for individuals and persons with disabilities are using the logical and mathematics knowledge
CO3	Assess the new dialogs through user feedback for further improving the Interactive tools
CO4	Explaining the dialogs in between Human and Computer for multimedia/ ecommerce/ e-learning Web sites applictions as a part of logical and programing knowledge
CO5	Developing a meaningful user interface needs the mathemtics, logical and programming knowledge

3	**High level**	**2**	**Moderate level**	**1**	Low level

Name & Sign of Faculty Incharge :

Name & Sign of Subject Expert :

Head of the Department :