Course Syllabus/Specification

Course Specification

‘

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program me specification.

1. Teaching Institution	**University of Al-Mustaqbal** **college of Science**
2. Department / Center	**Intelligent Medical Systems Department**
3. Course Title /Code	Human Computer Interaction in Health Care **MU03024202**
4. Modes of Attendance Offered	Presence
5. Semester/Year	2025-2026
6. Number of Hours Tuition (Total)	60
7. Date of Production of this Specification	15/9/2024
8. Course Description	To understand the interaction between human and computer. Hence, it is a science depends on understanding both sides (i.e., human and computer).
9. Aims of the Course This subject aims to define the basics of interaction between human and computer by studying the related topics.	

A. Knowledge and Understanding

1- define the basics of interaction between human and computer
2- Understand the human side and how they interact with interfaces
3- define the cognition
4- Explain how to design an interactive interface
5- Ask students to design an interactive system

Teaching and Learning Methods (Select from No. 17)
a. daily quizzes b. class activities c. suggestion of some websites to be viewed by students
Assessment Methods (Select from No. 18)
a. class interfering b. activity evaluation c. monthly tests d. projects and seminars
B. Subject-Specific Skills. -B1 summer practice -B2 graduation projects -B3 scientific research -B4
Teaching and Learning Methods (Select from No. 17)
a. administrating the class theoretically and practically to avoid student boring and miss understanding b. group homework and activities c. give a specific degree for these activities
C. Critical Thinking Skills -C1. Improving student's skills through some work to be submitted within a specific time -C2 improving the conversation and arguing skills -C3 analyzing the problems through scientific methodology -C4
Teaching and Learning Methods (Select from No. 17)
a. quizzes without previous announcement b. restricting the submission time
Assessment Methods (Select from No. 18)
a. involving and participation in class b. commitment with submission time c.
D. General and Transferable Skills. (Select from No. 16) -D1 improving the student abilities of using technical assessments. -D2 improving the student's ability of using internet -D3 improving the student's ability of using multimedia with security -D4

11. Course Structures					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	4	.learning the basics of the subject	Introduction to Human computer interaction y	Practical and theoretical	Daily quiz and HW
2	4	learning the basics of the subject	Interaction design	Practical and theoretical	Daily quiz and HW
3	4	learning the basics of the subject	Cognition	Practical and theoretical	Daily quiz and HW
4	4	learning the basics of the subject	Cognitive processes	Practical and theoretical	Daily quiz and HW
5	4	learning the basics of the subject	Social interaction	Practical and theoretical	Daily quiz and HW
6	4	learning the basics of the subject	Interfaces	Practical and theoretical	Daily quiz and HW
7	4	learning the basics of the subject	Prototyping	Practical and theoretical	Daily quiz and HW
8	4	learning the basics of the subject	Interaction design basics	Practical and theoretical	Daily quiz and HW
9	4	learning the basics of the subject	HCI in the software process	Practical and theoretical	Daily quiz and HW
10	4	learning the basics of the subject	Evaluation technique	Practical and theoretical	Daily quiz and HW
11	4	learning the basics of the subject	Midterm exam	Practical and theoretical	Daily quiz and HW
12	4	learning the basics of the subject	Usability	Practical and theoretical	Daily quiz and HW
13	4	learning the basics of the subject	Understanding users	Practical and theoretical	Daily quiz and HW
14	4	learning the basics of the subject	User interface design	Practical and theoretical	Daily quiz and HW
15	4	learning the basics of the subject	Project presentation.	Practical and theoretical	Daily quiz and HW

12. Infrastructure :	
I. Textbooks:.	**Ben Shneiderman , Catherine Plaisant," Designing the User Interface: Strategies for Effective Human-Computer Interaction," 4th Edition, 2004, Addison Wesley, ISBN 0321197860**
II. References:	**Alan D, Janet E. Gregory D. Russell B.," Human-Computer Interaction," 2003, Prentice Hall, ISBN 0130461091,** **rentice Hall, ISBN 0130461091**
III. Recommended reading: (Periodicals, Reports, …)	
IV. E-References, Websites, ….	

13. Assessments:		Type of Assessment Description											
	Weighting	Theory						Practical					
Course Work	Total	T.1	T.2		Assig.		Atten	T.1	T.2	Proj			Atten
	50	10	10		5		5	5	5	6			4
Final	Total	Theory						Practical					
	50	40						10					
Total	100												

14. Course Development Plan
Improving and adding new methods with rate not more than 10% every year.

15. ABET/CAC											
	Student Outcome	Course Objectives									
a	An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline	I	II	III	IV	V					
b	An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution					V					

c	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs					V					
d	An ability to function effectively on teams to accomplish a common goal					V					
e	An understanding of professional, ethical, legal, security and social issues and responsibilities					V					
f	An ability to communicate effectively with a range of audiences					V					
g	An ability to analyze the local and global impact of computing on individuals, organizations, and society					V					
h	Recognition of the need for and an ability to engage in continuing professional development					V					
i	An ability to use current techniques, skills, and tools necessary for computing practice					V					
Computer Science (CS) For CS Add (j &k) to (a – i)											
	Computer Science (CS)										
j	An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices				IV						
k	An ability to apply design and development principles in the construction of software systems of varying complexity				IV						
Information systems (IS) For IS Add (j) to (a – i)											
	Information systems (IS)										
j	An understanding of processes that support the delivery and management of information systems within a specific application environment				IV						
Information Technology (IT) For IT Add (j,k,l,m,n) to (a –i)											
	Information Technology (IT)										
j	An ability to use and apply current technical concepts and practices in the core information technologies			III							
k	An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems			III							
l	An ability to effectively integrate IT-based solutions into the user environment			III							

m	An understanding of best practices and standards and their application			III							
n	An ability to assist in the creation of an effective project plan			III							
(IB) Information Business Add fields according to IB											
	Information Business (IB)										
o	An ability to apply total quality management for it system and to develop the software.		II								
p	An ability to analyze quantitative models for business in a long term plan (strategy) in dynamic business.		II								
q	An ability to apply E-process for organization.		II								

16. General and Transferable Skills
a. Ability to adopt lifelong learning.
b. Ability to communicate information with other specialization.
c. Ability to solve problems.
d. Ability to communicate effectively with colleagues in work environment.

17. Teaching and Learning Methods
a. E-Learning
b. Self-Learning
c. Learning by Experimentation
d. Cooperative Learning
e. Brainstorming
f. Indirect Learning

18. Assessment Methods
a. Achievement Tests
b. Standard Tests
c. Individual Skills Assessment
d. Selection of Intellectual Question in Achievement tests
e. Collage Peer Assessment
f. Collective Project
g. Project consist of Random groups of Students
h. Students Performance Assessment

i. Experience and Professionalism Assessment