

## **Faculty of Computers and Information Technology**

### **Human Computer Interaction**

### **Information:**

Course Code: DM318 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Digital Media Technology

Instructor Information:				
Title	Name	Office hours		
Lecturer	Amira Mohey El Din Mohamed El Mandouh	4		
Teaching Assistant	Hajar Saleh Abdelwahab Mohamad Mohamad			
Teaching Assistant	Hoda Ahmad Moustafa Abdelrahman Ismail			

## Area Of Study:

#### **Description:**

This course focuses on the interaction between computer systems and the people who use them, introducing analysis and design techniques that can improve the quality of that interaction. Topics include design and evaluation of user interfaces, cognitive and social dynamics factors that affect usability, and software architecture considerations. While the emphasis is on conventional graphical and web user interfaces, alternative interface devices and technologies are also discussed.. Design guidelines, evaluation methods, participatory design, communication between users and system developers

Course ou	comes:		
a.Knowled	ge and Understanding: :		
1 -	Identify the basics of human and computational abilities and limitations.		
2 -	Comprehend basic theories, tools and techniques in HCI		
3 -	Outline the fundamental aspects of designing and evaluating interfaces		
b.Intellectu	ial Skills: :		
1 -	Use a variety of simple methods for evaluating the quality of a user interface		
2 -	Apply appropriate HCI techniques to design systems that are usable by people		
c.Profession	onal and Practical Skills: :		
1 -	Solve wide range of user interface problems using HCI concepts and principles		
2 -	Construct and evaluate new solutions for user interface problems		
d.General	and Transferable Skills: :		
1 -	Exploit a range of learning resources to solve real problem		

<sup>&</sup>quot;Apply the basics of human and computational abilities and limitations to design systems that are usable by people.

<sup>&</sup>quot;Apply the fundamental aspects of designing and evaluating interfaces.

<sup>&</sup>quot;Use appropriate HCI theories, tools and techniques to design usable interactive systems.

<sup>&</sup>quot;Practice a variety of simple methods for evaluating the quality of a user interface.



2 - Work in a team effectively and efficiently as the team is the standard fashion in which user interface design is carried out

ABET Course outcomes :				
1 -	Apply the basics of human and computational abilities and limitations to design systems that are usable by people			
2 -	Apply the fundamental aspects of designing and evaluating interfaces			
3 -	Select the appropriate HCI theories, tools and techniques to design usable interactive systems			
4 -	Practice a variety of simple methods for evaluating the quality of a user interface			

Course Topic And Contents :			
Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to Human-Computer Interaction	4	2	2
Introduction to Human-Computer Interaction	4	2	2
Task-centered system design.	4	2	2
User-centered design and prototyping	4	2	2
User-centered design and prototyping	4	2	2
Methods for evaluation of interfaces with users.	4	2	2
Methods for evaluation of interfaces with users.	4	2	2
Psychology of everyday things.	4	2	2
Mid-Term Exam	2		
Beyond screen design	4	2	2
Graphical screen design	4	2	2
Design principles and usability heuristics.	4	2	2
HCI design standards: process-oriented standards, product-oriented standards,	4	2	2
Final Exam	2		

# **Teaching And Learning Methodologies:**

Interactive Lectures including Discussions

**Practical Lab Sessions** 

Self-Study (Project / Reading Materials / Online Material / Presentations)

Case Studies

Course Assessment :					
Methods of assessment	Relative weight %	Week No	Assess What		
Assignments	5.00	4			
Final Exam	40.00	14			
Midterm Exam (s)	20.00	9			
Others (Participations)	5.00	1			
Quizzes	10.00	6			



Team Work Projects 20.00 12

## **Course Notes:**

An Electronic form of the Course Notes and all the slides of the Lectures is available on the Students Learning Management System (Moodle)