



KINGDOM OF SAUDI ARABIA  
 IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY  
 COLLEGE OF COMPUTER SCIENCE AND INFORMATION  
 COMPUTER SCIENCE DEPARTMENT  
 BACHELOR IN COMPUTER SCIENCE

المملكة العربية السعودية  
 جامعة الإمام محمد بن سعود الإسلامية  
 كلية علوم الحاسب والمعلومات  
 قسم علوم الحاسب  
 بكالوريوس نظم المعلومات

## SYLLABUS

### IS 370: Human-Computer Interaction

PREREQUISITE	IS220	CREDIT HOURS	3
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<b>Instructor: Dr. Lujain A. Aldahash</b>
<b>Contact information and office hours</b>
<b>Office No:</b> 4A-235
<b>Office Hours:</b>
<b>Sun – Mon - Tue: 7:30-8:20</b>
<b>Mon: 10:15 -11:05</b>
<b>Tues: 8:25-9:15 and 11:10-12:00</b>
<b>E-mail:</b> LAALDAHASH@imamu.edu.sa

COURSE DESCRIPTION
This course provides an introduction to the field of human-computer interaction (HCI), an interdisciplinary field that integrates cognitive psychology, design, computer science and others. Examining the human factors associated with information systems provides the students with knowledge to understand what influences usability and acceptance of IS. This course will examine human performance, components of technology, methods and techniques used in design and evaluation of IS. Societal impacts of HCI such as accessibility will also be discussed. User-centered design methods will be introduced and evaluated.

COURSE LEARNING OUTCOMES (CLOs)		Aligned SOs
<b>1</b>	<b>Knowledge and Understanding</b>	
1.1	Describe the concepts of user differences, user experience and collaboration as well as how to design contextually	1(I)
1.2	Describe the different devices used for input and output and the issues / opportunities associated with these devices	1(I)
1.3	State the role of theory and frameworks in HCI	1(I)
<b>2</b>	<b>Skills :</b>	
2.1	Design effective computer interfaces	2(P)
2.2	Apply contemporary techniques to evaluate computer interfaces	2(P)
2.3	Evaluate software design process in order to create computer interfaces	2(P)
<b>3</b>	<b>Values:</b>	
3.1	Function effectively on teams to accomplish a common goal	5(P)



3.2	Communicate effectively in oral and written form
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3(P)
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TEACHING Strategies
Class Lectures Class Discussion Self-learning

No	List of Topics	Contact Hours
1	Introduction to the Field of Human-Computer Interaction (HCI)	3
2	The Human	3
3	The computer	3
4	The Interaction	6
5	Interaction Design Basics	6
6	HCI in the software process	6
7	Design rules	3+3
8	Evaluation techniques	3+3
9	Project Discussions	3
<b>Total</b>		36+6(SL)

TEXT BOOK
A. Dix, J. Finlay, G. Abowd and R. Beale. Human Computer Interaction, Third Edition, Prentice Hall, 2004.

REFERENCES
Preece, Rogers & Sharp (2019), 5th ed. Interaction Design: Beyond Human Computer Interaction, John Wiley
Human Computer Interaction: Concepts, Methodologies, Tools, and Applications Book by Panayiotis Zaphiris Originally published: 2009 Author: Panayiotis Zaphiris Editor: Chee Siang Ang
Human Computer Interaction Handbook: Fundamentals, Evolving Technologies, originally published: January 1, 2012 Editor: Julie A. Jacko.
B. Shneiderman. Designing The User Interface, Third Edition, Addison Wesley, 1998.
J. Preece, Y. Rogers, H. Sharp, D. Benion. S.Holland, and T.Carey. Human Computer Interaction, Addison Wesley, 1994.

Course Assessment Methods			
No	Assessment Method	Due Week	%Total Assessment
1	Quiz	4	10
2	Assignment	6	10
3	Midterm	8	20



4	<b>Project / Lab Exam</b>	12	20
5	<b>Final Exam</b>	13	40