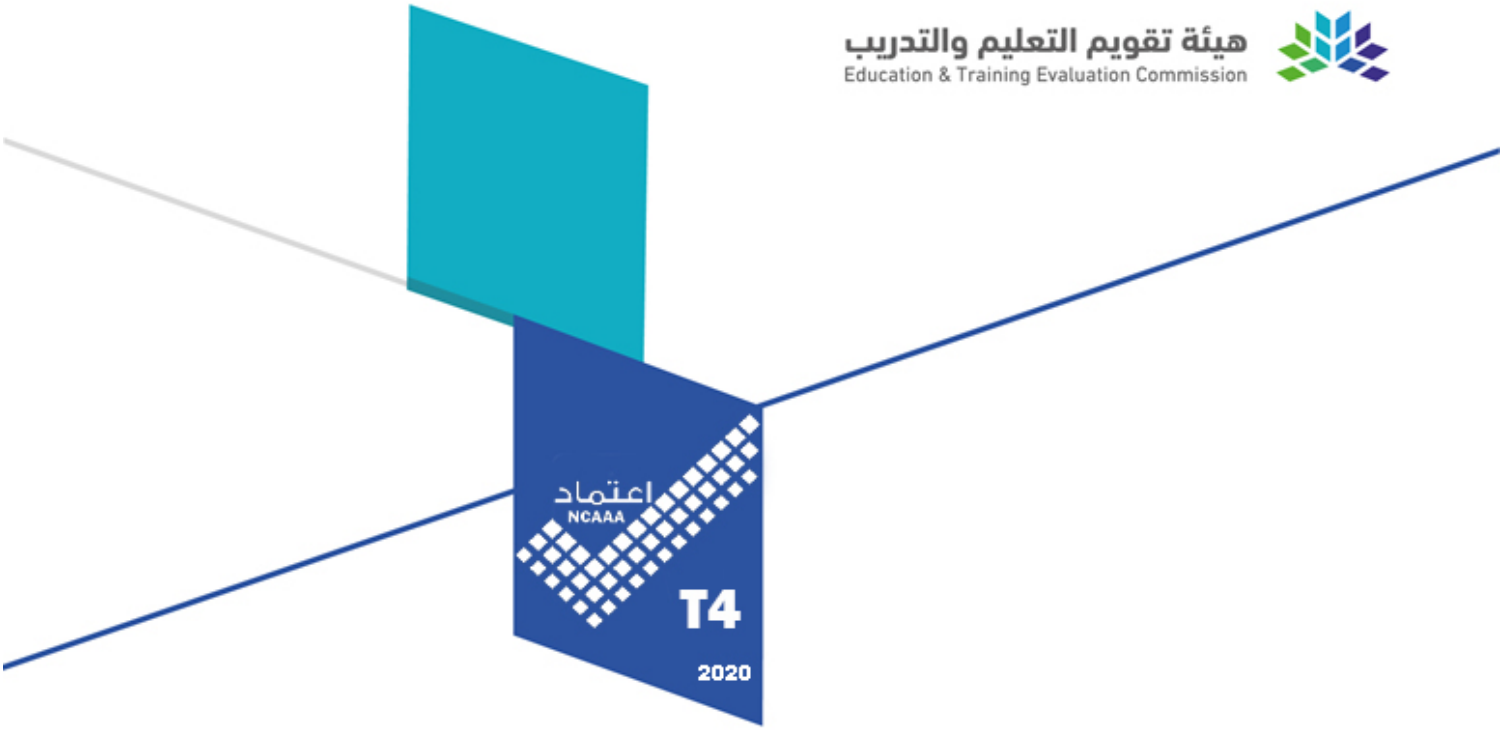
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	**Human Computer Interaction**
Course Code:	**CSI 522**
Program:	**Computer Science and Information**
Department:	**Computer Science and Information**
College:	**College of Science at Az Zulfi**
Institution:	**Al- Majmaah University**

Table of Contents

A. Course Identification

1. Credit hours: (3) (2 Lec + 2 lab)
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: 8h Level – 3rd year
4. Pre-requisites for this course (if any)**:** **CSI 511: Web Programming & Internet Technology**
5. Co-requisites for this course (if any)**:** NIL

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	48	80 %
2	**Blended**	6	10%
3	**E-learning**	-	--
4	**Distance learning**	-	--
5	**Other**	6	10 %

7. Contact Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	30
2	**Laboratory/Studio**	30
3	**Tutorial**	--
4	**Others** (specify)	--
	Total	60
Other Learning Hours*		
1	**Study**	45
2	**Assignments**	10
3	**Library**	05
4	**Projects/Research Essays/Theses**	15
5	**Others** (specify)	00
	Total	(60+75 = 135)

B. Course Objectives and Learning Outcomes

1. Course Description

Human-computer interaction is an interdisciplinary field that integrates theories and methodologies from computer science, cognitive psychology, design, and many other areas. The course is intended to introduce the student to the basic concepts of human-computer interaction. It will cover the basic theory and methods that exist in the field. The course will unfold by examining design and evaluation. Case studies are used throughout the readings to exemplify the methods presented and to lend a context to the issues discussed. The students will gain principles and skills for designing and evaluating interactive systems.

Among the topics studied are the design and evaluation of effective user interaction designs, including principles and guidelines for designing interactive systems. Additionally, much emphasis is given to the development process for user interaction designs as an integral, but different, part of interactive software development. User interaction development activities include requirements and task analysis, usability specifications, design, prototyping, and evaluation. It is a goal of this course to help students realize that user interface development is an ongoing process throughout the full product life cycle and developing the human-computer interface is not something to be done at the last minute, when the "rest of the system" is finished.

2. Course Main Objective

Human-Computer Interaction (HCI) is a rapidly expanding research and development area that has transformed the way we use computers in the last thirty years. The course introduces fundamental methods, principles and tools for designing, programming and testing interactive systems. It also introduces students to the design, implementation, and evaluation of human-computer interfaces, with emphasis on user-centered design and graphical user interfaces (GUI). The course covers topics such as usability and affordances, user-centered design, human cognitive and physical ergonomics, information and interactivity structures, interaction styles, interaction techniques, and user interface software tools with a special focus on mobile user interfaces.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Recognize the need for and an ability to engage in continuing professional development.	k2
2	**Skills :**	
2.1	Use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies.	s3
3	**Values:**	
3.1	Adhere professional, ethical, legal, security, and social issues and their responsibilities.	c1
3.2	Function effectively on teams to accomplish a common goal.	c4

C. Course Content

No	List of Topics	Contact Hours
1	Brief history of HCI, what is Interaction Design and Usability?	6
2	UI Design Paradigms	6
3	Human Factors Perspective- The User Profile	6
4	The computer aspect of Human Computer Interaction, design principles	6
5	User interface design Scenario Based Design and Heuristic Evaluation	6
6	Process of interaction design, Design Guidelines for Menus, Fill-in forms, and Commands	9
7	User modeling and the user profile and Adaptive interfaces, Evaluating Usability- web usability	3
8	Evaluating usability, Predictive and interpretive evaluation	3
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Recognize the need for and an ability to engage in continuing professional development.	Lectures Lab demonstrations Case studies Individual presentations	Written Exam Homework assignments Class & lab Activities Quizzes
2.0	**Skills**		
2.1	Use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies.	Group discussions, Brainstorming Presentations	HomeWorks and assignments
3.0	**Values**		
3.1	Adhere professional, ethical, legal, security, and social issues and their responsibilities.	Group discussions Case Studies Brainstorming Presentations	Written Exam Homework assignments Class & lab Activities Quizzes
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2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	First written mid-term exam	6	20%
2	Second online mid-term exam	12	20%
3	Class activities, group discussions, Presentation	Every week	10%
4	Homework + Assignments	After every chapter	10%
5	Final written exam	14	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :
Office hours: Mon : 10 – 12.
Email: k.sattar@mu.edu.sa

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	1.Alan Dix, Janet E. Finlay, Gregory D. Abowd, Russell Beale ,Human-Computer Interaction, 3rd edition, 2003 ISBN-10: 9780130461094, ISBN-13: 978-0130461094 2.Te'eni, D., Carey, J. & Zhang, P. (2007), Human-Computer Interaction: Developing Organizational Information Systems, John Wiley and Sons, Inc. ISBN-13: 978-0471677659, ISBN-10: 0471677655
Essential References Materials	1.I. Scott Mac Kenzie, Human-Computer Interaction ,An Empirical Research Perspective, Morgan Kaufmann, Elsevier,2013. Paperback ISBN: 9780124058651, eBook ISBN: 9780124071650. 2.Jenny Preece, Helen Sharp, Yvonne Rogers, Interaction Design: Beyond Human-Computer Interaction 4th Edition,2015. ISBN-10: 1119020751,ISBN-13: 978-1119020752. 3.Zhang, Ping & Galletta, Dennis (2006), Human Computer Interaction and Management Information Systems: Foundations, M. E. Sharpe Inc., ISBN-10: 1138692824, ISBN-13: 978-1138692824.
Electronic Materials	1.http://hcibook.com/e3/plain/chaps/intro 2.http://nptel.ac.in/courses/106103115/ 3.http://iitg.vlab.co.in/?sub=72&brch=170 4.http://bcs.wiley.com/hebcs/Books?action=chapter&bcsId=3150&itemId=0471677655&chapterId=24819 5.http://iiscs.wssu.edu/drupal/node/3348
Other Learning Materials	Course material includes handouts, ppt, questionnaires as distributed among the students

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	1. Classrooms with required digital aids and to support traditional method of teaching using blackboard. 2. Classrooms with proper lighting and air conditioning system integrated with the sound System /audio system. Classroom with smart board interface, display screen and a computer to aid the sessions
Technology Resources (AV, data show, Smart Board, software, etc.)	Smart Board with supporting software / computers with updated versions of software as required to understand the subject concepts with quality headphones.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	NIL

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	Students Classroom Observation Committee Professional Development Unit External Reviewers – accreditation committee	Formal Classroom Observation - Direct Student Surveys - Indirect
Effectiveness of Assessment	Curriculum and Test Development Unit Curriculum Committee Assessment Committee External Reviewers	Faculty Feedback - indirect Student Feedback – indirect Course Reports
Extent of Achievement of Course Learning Outcomes	Quality Assurance Unit Curriculum and Test Development Unit	Course Reports Annual Program Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date