جامعة المجمعة
Majmaah University

Course Specifications

Institution:	**Majmaah University, College of Science at Az Zulfi**
Academic Department :	**Department of Computer Science and Information**.
Programme :	**Computer Science and Information Program**
Course :	**Human-Computer Interaction (HCI)**
Course Coordinator :	Dr. Yaser Abdalla
Programme Coordinator :	Dr. Yosry Azzam
Course Specification Approved Date :	22./ 12 / 1435 H

This form compatible with NCAAA 2013 Edition

A. Course Identification and General Information

1 - Course title: Human-Computer Interaction (HCI)	Course code: CSI-522
2. Credit hours :	(3)
3 - Program(s) in which the course is offered:	Computer Science and Information
4 – Course Language :	English
5 - Name of faculty member responsible for the course:	Dr. Yaser Abdalla
6 - Level/year at which this course is offered :	8th level
7 - Pre-requisites for this course (if any) : • Web Programming & Internet Technology (CSI 511)	
8 - Co-requisites for this course (if any) : • N/A	
9 - Location if not on main campus : • N/A	

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	80 %
B - Blended (traditional and online)	√	What percentage?	10 %
D - e-learning		What percentage?	……. %
E – Correspondence		What percentage?	……. %
F - Other	√	What percentage?	10 %

Comments :

……

B Objectives

What is the main purpose for this course?

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.

Briefly describe any plans for developing and improving the course that are being implemented :

1. Acquire the fundamentals of Human-Computer Interaction
2. Develop interactive UI evaluation skills
3. Develop a toolbox of proper design guidelines
4. Acquire GUI programming skills
5. Learn a variety of interface evaluation techniques

C. Course Description

1. Topics to be covered

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

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	-	-	30	-	60
Credit	30	-	-	15	-	45

3. Additional private study/learning hours expected for students per week.

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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	explain why it is important to design Interactive products that are usable	Lectures, Lab demonstrations,	Written Exam, Homework, assignments

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.2	Gain knowledge on the interplay between humans, tasks, technology, and contexts.	Case studies, and Individual presentations.	Lab assignments, Class Activities, and quizzes.
1.3	gain knowledge on important human factors that affect human-computer interactions		
2.0	**Cognitive Skills**		
2.1	To be able to conduct task analysis within contexts	Small group discussion Whole group discussion Brainstorming Presentation	Written Exam, Homework, assignments Lab assignments, Class Activities, and quizzes.
2.2	To be able to apply HCI principles, guidelines, methods, and techniques for human-centered information systems development		
2.3	To be able to conduct HCI evaluations and usability studies.		
2.4	To be able to critique HCI designs of others.		
3.0	**Interpersonal Skills & Responsibility**		
3.1	Work in a group and learn time management.	• Discussion with students • Making students aware about time management in completing their assignments. • Counsel students how to make a good presentation in HCI. • Encourage students to help each other.	• Respecting deadlines. • Showing active class participation. • Helping other students to understand tasks in the class. • Giving clear and logical arguments • Performing seriously on midterms and final exams
3.2	Learn how to search for information through library and internet.		
3.3	Present a short report in a written form and orally using appropriate scientific language		
4.0	**Communication, Information Technology, Numerical**		
4.1	Communicate with teacher, ask questions, solve problems, and use computers.	• Exercises • Problem solving • oral quizzes • Essay questions Encourage students to Implement a real HCI system.	• Write reports • Exercises related to specific topics
4.2	Illustrate and use the HCI technologies effectively.		
4.3	Discus questions during the lecture, work in groups, communicate with each other and with me electronically, and periodically visit the sites I recommended.		
5.0	**Psychomotor: N/A**		

5. Schedule of Assessment Tasks for Students during the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	First written mid-term exam	6	15%
2	Second written mid-term exam	12	15%
3	Presentation, class activities, and group discussions	Every week	10%
4	Homework assignments	After Every chapter	10%
5	Implementation of HCI based systems	Every two weeks	10%
6	Final written exam	16	40%
7	Total		100%

D. Student Academic Counseling and Support

Office hours: Sun: 10-12, Mon: 10-12, Wed: 10-12
Office call: Sun: 12-1 and Wed: 12-1
Email: y.salem@mu.edu.sa

E. Learning Resources

1. List Required Textbooks :

- Te'eni, D., Carey, J. & Zhang, P. (2007), Human-Computer Interaction: Developing Organizational Information Systems, John Wiley and Sons, Inc. ISBN: 0471677655

2. List Essential References Materials :

- Rex Hartson, Pardha Pyla , Process and Guidelines for Ensuring a Quality User Experience, The UX Book, 2011

3. List Recommended Textbooks and Reference Material :

- Zhang, Ping & Galletta, Dennis (2006), Human Computer Interaction and Management Information Systems: Foundations , M. E. Sharpe Inc., ISBN-10: 0765614863 ISBN-13: 978- 0765614865

4. List Electronic Materials :

- Video and presentation are available in course page
- http://faculty.mu.edu.sa/ysalem/

5. Other learning material :

- N/A

F. Facilities Required

1. Accommodation

- Classrooms and Labs, as those that are available at college of science at AzZulfi.

2. Computing resources

- Education console
- Smart Board

3. Other resources

- **None**.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Questionnaires (course evaluation) achieved by the students and it is electronically organized by the university.
- Student-faculty management meetings.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Discussion within the staff members teaching the course
- Departmental internal review of the course.

3 Processes for Improvement of Teaching :

- Periodical departmental revision of methods of teaching.
- Monitoring of teaching activates by senior faculty members.
- Training course.

4. Processes for Verifying Standards of Student Achievement

- It is planned to:-
- Check marking of a sample of student work by an independent faculty member.
- Exchange periodically, and remark a sample of assignments with a faculty member in one of distinguished institutes **.**

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- Assessment and evaluation of the level of achieving the course outcomes through a continuous improvement process (part of a quality assurance system established by the university)
- Consequently, actions are to be taken to improve the course delivery when necessary.
- Review of the course objectives, outcomes and curriculum at about 2 years span

Course Specification Approved

Department Official Meeting No (…..) Date … / …. / ….. *H*

Course's Coordinator		Department Head	
Name :	Dr. Yaser Abdalla	***Name :***	Dr. Yousry Azzam
Signature :	.....	***Signature :***	.....
Date :	…./ … / …… *H*	***Date :***	…./ … / …… *H*