Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment

المملكــة العربيــة السعوديــة
الهيئــة الوطنيــة للتقويــم
والاعـتـمـاد الأكـاديـمــي

ATTACHMENT 2 (e)

Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specification

Human-Computer Interaction
14024402-3

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Course Specification

Institution	**Umm Al Qura University**	Date of Report: **07-1437 / 04-2016**

College/Department
College of Computers and Information Systems
Information Systems Department

A. Course Identification and General Information

1. Course title and code:

    Human-Computer Interaction
    14024402-3

2. Credit hours

    3 credits

3. Program(s) in which the course is offered.

    Information Systems, Bachelor of Science

4. Name of faculty member responsible for the course

    Dr Skander Turki

5. Level/year at which this course is offered

    year 4 after preparatory / level 9

6. Pre-requisites for this course (if any)

    14022301-3 Internet Technologies

7. Co-requisites for this course (if any)

8. Location if not on main campus:

Delivered in the four locations where the Information Systems BSc is given:
- Al Abidiyya main campus boys section,
- Al Zahir main campus girls section,
- Al Qunfuda Boys section,
- Al Qunfuda Girls section.

9. Mode of Instruction (mark all that apply)

a. Traditional classroom	X	What percentage?	100%
b. Blended (traditional and online)		What percentage?	
c. e-learning		What percentage?	
d. Correspondence		What percentage?	
f. Other		What percentage?	

Comments:

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B Objectives

1. What is the main purpose for this course?

Human-Computer Interaction is an area of study that focuses on user acceptance of interactive-software-intensive systems. In software engineering, user-acceptance testing has been identified as essential testing step along with unit, integration, installation and other testing activities. User resistance to change is also one of the risks that may affect how far a software solution is accepted by end users. Studying HCI is therefore an important in this regard as it gives the software developer the foundations that will allow him to better mitigate these acceptance risks.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

     An adaptation can be done when reviewing the program.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1 Topics to be Covered		
List of Topics	No of Weeks	Contact hours per week
Introduction to Human-Computer Interaction and to Interaction Design	2	4
Understanding and Conceptualizing Interaction	2	4
Cognitive Aspects	2	4
Social and emotional Interaction	2	4
Interfaces	2	4
Data gathering	2	4
Data analysis, Interpretation and presentation	2	4
Interaction design in practice: Use case	2	4

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2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	32		32			64
Credit	80		20			100

3. Additional private study/learning hours expected for students per week.	2

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

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The *National Qualification Framework* provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

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	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	examine the concept of a human computer interaction and what it means to develop and implement user-centered computer information system;	The course is conducted using lectures and labs. The lectures provide the major theoretical and foundational concepts of HCI. The lab sessions provide the instruction on the course project, exercises, and general discussion.	homework assignments, term project, labs, Quizzes, and exams
1.2	examine techniques for identifying the information and processing user needs of computer information system;		
1.3	use basic modeling tools for representing the analysis and the design of user-centered computer information system;		
1.4	design a system from the specifications including the user interface, and system module structure.		
2.0	**Cognitive Skills**		
2.1	To be able to analyze the users' requirements and determine the appropriate interface.	Lectures, Labs, Project	• Quizzes and/or Online Quizzes, • Midterm, • Final Exam • Lab exam • Project evaluation
2.2	To be able to analyze alternative methods of interaction with software and to select and improve them.	Lectures, Labs, Project	
3.0	**Interpersonal Skills & Responsibility**		
3.1	Be able to conduct discussion about design choices within a team	Project defence in teams	Project defence evaluation
4.0	**Communication, Information Technology, Numerical**		
4.1	Be able to conduct discussion about design choices	Project with project defence	Project defence evaluation
5.0	**Psychomotor**		
5.1	N/A		
5.2			

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs

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Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

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Suggested *verbs not to use* when writing measurable and assessable learning outcomes are as follows:

Consider	Maximize	Continue	Review	Ensure	Enlarge		Understand
Maintain	Reflect	Examine	Strengthen	Explore	Encourage		Deepen

Some of these verbs can be used if tied to specific actions or quantification.
Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5.   Schedule of Assessment Tasks for Students During the Semester

Assessment	Assessment task (eg. Essay, test, group project, examination etc.)	Week due	Proportion of Final Assessment
1	Quiz	3, 6, 9,12	10%
2	Mid term	8	20%
3	Lab exam	Lab exams week (usually 16th)	10%
3	Project	15	30%
4	Final exam	Exam week	30%

D. Student Support

1.Arrangements for availability of teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Office hours and meeting on projects

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E Learning Resources

1. Required Text(s) : Shneiderman, B. and Plaisant, C. (2010) *Designing the user interface: Strategies for effective Human-Computer Interaction*, 5th Edition. ISBN: 0321537351.
2. Essential References Rodgers, Y., Sharp, H., Preece, J. (2011). Interaction Design: Beyond Human-Computer Interaction, 3rd ed. Wiley
3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List) Alan Dix et al, "Human-Computer Interaction," 3rd Edition, 2003, Prentice Hall, ISBN 0130461091
4-.Electronic Materials, Web Sites etc
5- Other learning material such as computer-based programs/CD, professional standards/regulations Most lab on computer systems

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Lecture rooms, laboratories, etc.) Lecture room
2. Computing resources
3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching   • Online –any time- feedback electronic form

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• End of term Feedback
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
3 Processes for Improvement of Teaching • Offering training sessions & Workshops • Providing specialized educational journals
4. Processes for Verifying Standards of Student Achievement (eg. check marking by an independent faculty member of a sample of student work, periodic exchange and remarking of a sample of assignments with a faculty member in another institution) • External Examiners • Marking an exam by a Group of faculty members; each marks a question of the exam for example.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. • Study and analyse the feedback from students. • Compare the learning outcomes with real students' results and skills they have gained. • Review the course periodically by the curriculum committee to check with ACM requirements and top universities.. • Review the course periodically by the quality assurance unit.

Faculty or Teaching Staff: _____

Signature: _____ **Date Report Completed:** _____

Received by: _____ **Dean/Department Head: Dr. Skander Turki**

Signature: _____ **Date: 07-1437 / 04-2016**