

ATTACHMENT 2 (e)

Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

**Course Specifications
(CS)**

Course Specifications

Institution Najran University	Date of Report 17 / 2 / 2015
College/Department : College of Science and Arts Sharourah/ Department of Computer Science	

A. Course Identification and General Information

1. Course title and code: Title: Human-Computer Interface Code: 609CS-3 (٦٠٩ع-٣)			
2. Credit hours : 3			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Computer Science (One Program Only in the Dept.)			
4. Name of faculty member responsible for the course Dr. Makarem Mohammed Bamatraf			
5. Level/year at which this course is offered: Level 6			
6. Pre-requisites for this course (if any) 303CS-4 (Object Oriented Programming using Java)			
7. Co-requisites for this course (if any) None			
8. Location if not on main campus Male and Female Branches			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	☒	What percentage?	100%
b. Blended (traditional and online)	☐	What percentage?	
c. e-learning	☐	What percentage?	
d. Correspondence	☐	What percentage?	
f. Other	☐	What percentage?	
Comments:			

B Objectives

1. What is the main purpose for this course? The main purposes of this course are to make student able to: 1) Memorize knowledge and concepts of human-computer interaction interfaces. 2) Define methods for designing and evaluating human-computer Interaction interfaces. 3) Use logical thinking for evaluating interfaces of human-computer interaction
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) More recent textbook has been used due to the following reasons: 1) Text book is recently written by Ben Sheilderman whom the founding director of human-computer interaction laboratory. Ben Sheilderman is regarded as a international leader in HCI discipline. 2) The 3 rd edition of this book was one of the references of the text book previously used for this course. 3) The previous text book "Alan Dix et. al., Human-Computer Interaction, 2003" was an old one which was published in 2003. 4) The book of Ben Sheilderman is available in the Faculty of science and Arts – Asharourah.

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

This course covers the following topics: the HCI and HCI as discipline, Usability and of Interactive Systems, Guidelines, Principles, and Theories, Design Processes, Evaluating interface Designs. The course also covers gives details on Interaction Styles: Direct Manipulation and Virtual Environments, Menu Selection, Form Fill-In, and Dialog Boxes, Command and Natural Languages, Interaction Devices and midterm exam, Interaction Devices and midterm exam, Collaboration and Social Media Participation. This course focuses on some design issues such as: Quality of Service, User Documentation and Online Help, Information Search, Information Visualization.

Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Introduction to the meaning of HCI discipline Usability and of Interactive Systems (Usability goals and measures, Usability Motivations, Universal Usability)	1	3Lect.
Guidelines, Principles, and Theories Task analysis and decomposition, Eight Golden rules for interface design.	1	3Lect.
Managing Design Processes	1	3Lect.
Evaluating interface Designs	2	6Lect.
Interaction Styles: Direct Manipulation and Virtual Environments	1	3Lect.
Interaction Styles: Menu Selection, Form Fill-In, and Dialog Boxes	1	3Lect.
Interaction Styles: Command and Natural Languages	1	3Lect.

Interaction Styles: Interaction Devices and midterm exam	1	2Lect 1Exam
Interaction Styles: Collaboration and Social Media Participation	1	3Lect.
Design Issues: Quality of Service	1	3Lect.
Design Issues: Balancing function and fashion	1	3Lect
Design Issues: User Documentation and Online Help	1	3Lect.
Design Issues: Information Search	1	3Lect.
Design Issues: Information Visualization	1	3Lect.

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	45					45
Credit	45					45

3. Additional private study/learning hours expected for students per week.	3
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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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.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Memorize principles and general concepts for human-computer interaction interfaces	Lectures	Written Exam
1.2	Memorize the difference between design processes of human-computer interaction	Lectures	Written Exam
1.3	Define concepts of models or styles of designing human-computer interaction	Lectures	Written Exam
2.0	Cognitive Skills		
2.1	Uses logical thinking in evaluating interfaces of human-computer interaction	Lectures, and Assignments	Written Exam Project or Assignments
2.2	Uses different models or styles of interaction for designing interfaces	Lectures, and Assignments	Written Exam Project or Assignments
2.3			
3.0	Interpersonal Skills & Responsibility		
3.1			
3.2			
4.0	Communication, Information Technology, Numerical		
4.1			
4.2			
5.0	Psychomotor		
5.1			
5.2			

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
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	demonstrate, calculate, illustrate, interpret, research, question, operate,

Technology, Numerical	appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

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 task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Midterm Exam	8	20
2	Quizzes	During the semester	10
3	Assignments	During the semester	10
4	Final Exam	At the end of semester	50
5	Attendance	During the semester	10

D. Student Academic Counseling and Support

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

For one credit hours there are two office hours per week.

E. Learning Resources

1. List Required Textbooks

Ben Shneiderman , Catherine Plaisant , Designing the User Interface: Strategies for Effective Human-Computer Interaction, 5th edition, 2010.

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

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then click on protected reader resources

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Class room with 30seats

2. Computing resources (AV, data show, Smart Board, software, etc.)

1- Data show with screen.

3. Other resources (specify, e.g. 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: ✓ Distribution of a questionnaire for students to know how to achieve the goals in the theoretical and practical side.
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor: ✓ Discussions with colleagues who specialize in teaching methods and means of learning. ✓ Self-evaluation of the performance of the teacher. ✓ Discussions with other colleagues who taught this course.
3 Processes for Improvement of Teaching ✓ Diagnose weaknesses and turn them into strengths. ✓ Discussions about the decision and methods of teaching ✓ Study the needs of the labor market of college graduates
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

Faculty or Teaching Staff: **Dr. Makarem Mohammed Bamatraf**

Signature: _____ Date Report Completed: 17 – 2 – 2015

Received by: _____ Dean/Department Head

Signature: _____ Date: _____