

ATTACHMENT 5.

Kingdom of Saudi Arabia
**The National Commission for Academic Accreditation &
Assessment**

14014901-4 Graduation Project I
(CS)

Course Specifications

Institution	Umm Al Qura University	Date	8/7/1437
College/Department	College of Computers and Information Systems		

A. Course Identification and General Information

1. Course title and code: 14014901-4 Graduation Project I			
2. Credit hours 4			
3. Program(s) in which the course is offered. Computer Science			
4. Name of faculty member responsible for the course Curriculum Committee			
5. Level/year at which this course is offered level 9			
6. Pre-requisites for this course 1401312-3 – Fundamentals of Database Systems and 1401313-3 – Software Engineering			
7. Co-requisites for this course			
8. Location if not on main campus Al-Abidiyah campus (Boys) and Al-Zaher campus (Girls), Makkah Al Mukarramah			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="100"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments:.			

B Objectives

1. What is the main purpose for this course?

This course is the first semester of the required major design experience. In a two semester-long project, student teams will propose, design, produce and evaluate a software and/or hardware system. The project will culminate in the delivery of a working system, a formal public presentation, and written documentation. Oral and written progress reports are required.

1. Ability to apply knowledge of mathematics, computing, science, and engineering appropriate to the discipline.
2. Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
3. Ability to function effectively on teams to accomplish a common goal.
4. Ability to communicate effectively.
5. Recognition of the need for, and an ability to engage continuing professional development.
6. Ability to use the current techniques, skills, and tools necessary for computing practice.
7. Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices
8. Ability to apply design and development principles in the construction of software systems of varying complexity

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)

1. Increase the use of textbooks.
2. Gather students' opinions about their success in achieving course objectives by the end of the semester. This is done through number of survey questions that map one-to-one with course objectives.
3. Review and indicate which assessment instrument(s) to be used for assessing each course outcome, and what grading rubric will be used for each instrument.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

This course is the first semester of the required major design experience. In a two semester-long project, student teams will propose, design, produce and evaluate a software and/or hardware system. The project will culminate in the delivery of a working system, a formal public presentation, and written documentation. Oral and written progress reports are required.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
N/A	N/A	N/A

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	30	0	30			
Credit						

3. Additional private study/learning hours expected for students per week.	4 <u>hours</u>
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy			
On the table below are the five NQF Learning Domains, numbered in the left column.			
<p>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. (Courses are not required to include learning outcomes from each domain.)</p>			
Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
2.0	Cognitive Skills		
2.1	Ability to apply knowledge of mathematics, computing, science, and engineering appropriate to the discipline.	Project Supervision	Report. presentation
2.2	Ability to use the current techniques, skills, and tools necessary for computing practice.	Project Supervision	Report. presentation

2.3	Ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.	Project Supervision	Report. presentation
3.0	Interpersonal Skills & Responsibility		
3.1	Ability to function effectively on teams to accomplish a common goal.	Project Supervision	Report. presentation
3.2	Recognition of the need for, and an ability to engage continuing professional development.	Project Supervision	Report. presentation
4.0	Communication, Information Technology, Numerical		
4.1	Ability to communicate effectively.	Project Supervision	Report. presentation
4.2	Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer based systems in a way that demonstrates comprehension of the trade-offs involved in design choices	Project Supervision	Report. presentation
4.3	Ability to apply design and development principles in the construction of software systems of varying complexity	Project Supervision	Report. presentation
5.0	Psychomotor		

5. Map course Los with the program Los. (Place course LO #s in the left column and program LO #s across the top.) (I = Introduction P = Proficient A = Advanced)

Course Los #	Program Learning Outcomes (Use Program LO Code #s provided in the Program Specifications)														
	1.1	1.2	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	5.1	5.2
2.1				P											
2.2						P									
2.3															
3.1								P							
3.2										P					
4.1											P				
4.2												P			
4.3													P		

6. 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
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1	Process (Weekly Meetings)	Every Week	20%
2	Project Report	14	45%
3	Project Presentation	16	35%

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)

Office hours between 2-4 hours per week.

E Learning Resources

1. List Required Textbooks

UQU Undergraduate Final Year Project Handbook

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

Sample Reports from UQU Undergraduate Final Year Projects

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

Software Engineering – Principle and Practice Hans Van Vliet

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Sams Teach Yourself UML in 24 Hours

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

1. IBM Rational Rose Enterprise Edition
2. MS Project by Microsoft

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.)

N/A
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Lecture room (max 40 students) Computer lab (max 20 students)</p>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.) Separate Research Labs for Graduation Projects Students</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)</p> <ol style="list-style-type: none"> 1. IBM Rational Rose Enterprise Edition 2. MS Project by Microsoft

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <p>A student-feedback form is distributed at the end of the course.</p>
<p>2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department</p> <p>Weekly progress report about project should be submitted by students to their supervisors and also to the department.</p>
<p>3 Processes for Improvement of Teaching</p> <ol style="list-style-type: none"> 1. Introductory Seminar for UQU Undergraduate Final Year Project. 2. Seminars about different domain of Software Engineering Projects. 3. Workshops for modern development environments like Android and IOS development
<p>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) Internal Seminars after four weeks to test the achievements/progress of students by Department.</p>
<p>5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <p>Every End of Semester ask faculty members to provide their suggestions to make course more effective</p>

Name of Instructor: _____

Signature: _____ Date Report Completed: _____

Name of Course Instructor _____

Program Coordinator: _____

Signature: _____ Date Received: _____