

**ATTACHMENT 2 (e)**

**Course Specifications**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specification**

**Business Process Modeling  
14023103-3**

## Course Specification

Institution	<b>Umm Al Qura University</b>	Date of Report: <b>07-1437 / 04-2016</b>
College/Department	<b>College of Computers and Information Systems Information Systems Department</b>	

### A. Course Identification and General Information

1. Course title and code:	<b>Business Process Modeling 14023103-3</b>		
2. Credit hours: 3 credits			
3. Program(s) in which the course is offered.	<b>Information Systems, Bachelor of Science</b>		
4. Name of faculty member responsible for the course: Dr. Skander Turki			
5. Level/year at which this course is offered: 3rd year after preparatory / level 8			
6. Pre-requisites for this course (if any):	14023102-4 Operations Research		
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:	<ul style="list-style-type: none"> <li>- Al Abidiyya main campus boys section,</li> <li>- Al Zahir main campus girls section,</li> <li>- Al Qunfuda Boys section,</li> <li>- Al Qunfuda Girls section.</li> </ul>		
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 will introduce students to analytical tools that can be used to model, analyse, understand and design business processes. Students will also gain hands-on experience in using simulation software as a tool for analysing business processes.

Outcomes:

At the completion of this unit students will:

Have a thorough understanding of business organisations, their functional structure and the advantage of considering the process oriented view of organisations;

Demonstrate a thorough knowledge of business processes, their structure and how processes fit in to the overall organisation objectives;

Be able to use analytical tools for modeling, analysing, understanding and designing business processes;

Have acquired skills to use simulation software as a tool for analysing business processes;

Be able to report to and advise management on business process design and re-engineering issues

### 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
Business Process Context: Purpose and Process	1	2
Organizational Model of Processes	2	4
Building AS IS Models	2	4
Business Process Measures and Documenting Tasks	2	4
Evaluating and Improving Business Processes	2	4
Queuing Systems and Business Process Design	3	6
Business Process Simulation	2	4
Guest Lecture : A Case of Six Sigma Quality	2	4

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	16		16			32
Credit	32		32			64

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

	<b>NQF Learning Domains And Course Learning Outcomes</b>	<b>Course Teaching Strategies</b>	<b>Course Assessment Methods</b>
<b>1.0</b>	<b>Knowledge</b>		
1.1	Master the fundamental principles and concepts and tools in the general area of Business Process modelling and Design	Course lectures, homeworks	QUIZ and online quiz EXAMS
1.2	Demonstrate a thorough knowledge of business processes, their structure and how processes fit in to the overall organization objectives;	Course lectures, homeworks	QUIZ and online quiz EXAMS
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	Be able to analyse and design business processes;	Lectures: Include use cases. Textbook must illustrate concepts through use cases. Use case Project. Exercises & Home works ,	Quizzes and/or Online Quizzes, Midterm, Final Exam Project assessment.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	N/A		
3.2			
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	Have acquired skills to use simulation software as a tool for analysing business processes;	Use case project with defence	Project defence assessment.
4.2	Be able to report to and advise management on business process design and re-engineering issues	Use case project with defence	Project defence assessment.
<b>5.0</b>	<b>Psychomotor</b>		
5.1	N/A		
5.2			

#### Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

<b>NQF Learning Domains</b>	<b>Suggested Verbs</b>
<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	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

<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	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	Assessment task (eg. essay, test, group project, examination etc.)	Week due	Proportion of Final Assessment
1	Midterm Exam	8	20%
2	Quizzes	1 Each 4 weeks	10%
3	Project	15	20%
4	Lab Exam	15	10%
5	Final Exam	Exams week	40%

#### 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)

All faculty members are expected to include six weekly office hours. These office hours are displayed in each faculty's schedule and communicated to students.

#### E. Learning Resources

1. Required Text(s) : Managing Business Process Flows, Principles of Operations Management, Third Edition, Anupindi, Ravi, Sunil Chopra, Sudhakar D. Deshmukh, Jan A. Van Mieghem, and Eitan Zemel, Pearson Prentice Hall, 2012, ISBN-10: 0-13-603637-6

2. Essential References

Business Process Change, A Guide for Business Managers and BPM and Six Sigma Professionals, Second Edition, Paul Harmon, Morgan Kaufmann Publishers, 2007

3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List)

- Wisner J D, Stanley L L.. (2008). *Process Management - Creating Value along the supply chain.* () Thomson South-Western Publishing.
- Havey, M. "Essential Business Process Modeling". O'Reilly Media, 2005. ISBN 0596008430.
- Laguna, M., Marklund, J. "Business Process Modeling, Simulation and Design". Prentice Hall, 2004. ISBN 0131099795.
- Scheer, A. W. "ARIS - Business Process Modeling". Springer, 2000. ISBN 3540658351.

4-.Electronic Materials, Web Sites etc  
available academic resources and links to Dailymotion YouTube on line courses

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 Lab for Business Process: ARIS and INNOV8, Scitor Process Modelling Tools : MS Visio, Visual Architect
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 End-of-term course/teacher evaluation for is to be completed by students at the end of the semester, evaluating the content of the course, its teaching, the learning, assessment methods.. The monitoring of these students feedback will allows the course quality improvement
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department <ul style="list-style-type: none"> <li>• Peer Evaluation Procedure</li> <li>• Instructor self-evaluation</li> </ul>
3. 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) <ul style="list-style-type: none"> <li>• Upon student request, his/her work might be remarked by another faculty member within the department.</li> </ul>
4 Processes for Improvement of Teaching <ul style="list-style-type: none"> <li>• (Self , Peer) Review, Identify, Analyse, and Revise</li> </ul>
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none"> <li>- Review and update course content</li> <li>- Update course references</li> <li>- Use students feedback</li> </ul>

Faculty or Teaching Staff: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Received by: \_\_\_\_\_ Dean/Department Head: Dr. Skander Turki

Signature: \_\_\_\_\_ Date: 07-1437 / 04-2016