Course Name: Quality Assurance of Information Systems and Programming
Course Code: IS434

I. Basic Course Information

Major or minor element of program: Major
Department offering the course: Information Systems Department

Academic level: 400 Level
Semester in which course is offered: Second (Spring) Semester

Course pre-requisite(s): System Analysis and Design - 2 [IS352]

Credit Hours: 3
Contact Hours Through:

Lecture	Tutorial *	Practical *	Total
2.5	1.5	0.0	4.0

* 1.5 hours for **either** Tutorial or Practical

Approval date of course specification: January 2015

II. Overall Aims of Course

To set quality standards for IS development, IS delivery and acceptance, IS testing and IS implementation

III. Program ILOs covered by course

Program Intended Learning Outcomes (By Code)			
Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
K9,K18,K21	I7,I13,I18	P7,P9,P15	G2,G4,G6

IV. Intended Learning Outcomes of Course (ILOs)

a. Knowledge and Understanding

On completing the course, students should be able to:

K.1 Define quality-assured information systems.
K.2 Describe and list systems analysis methods.
K.3 Describe and list conceptual systems design methods.
K.4 Recognize project management.
K.5 Define system planning.
K.6 State systems analysis.

b. Intellectual/Cognitive Skills

On completing the course, students should be able to:

I.1 Analyse and evaluate appropriate information technologies.
I.2 Design and develop appropriate planning and analysis methods.
I.3 Design and formulate methodologies, techniques and tools to be applied on pilot projects.

c. Practical/Professional Skills

On completing the course, students should be able to:

P.1 Use laboratory techniques: Microsoft Visio 2007 for drawing definite diagrams.
P.2 Use IT for data processing: Select SSADM or Power designer CASE tools.
P.3 Apply practical skills through data gathering methods.
P.4 Apply designed methodologies, techniques and tools on pilot projects.

d. General and Transferable Skills

On completing the course, students should be able to:

G.1 Develop interviewing skills.
G.2 Develop and enhance communication skills.
G.3 Develop and enhance technical report writing skills.
G.4 Develop and enhance project management and team working skills.

V. Course Matrix Contents

	Main Topics / Chapters	Duration (Weeks)	Course ILOs Covered by Topic (By ILO Code)			
			K & U	I.S.	P.S.	G.S.
1-	The value of systems analysis and design	0.5	K1, K6			
2-	The components of information systems	0.5	K1,K5			
3-	Developing information systems	1.5	K1	I1		
4-	Project management	1.5	K4	I2		G2
5-	Systems analysis	3	K2,K6		P2,P4	G1,G2
6-	Requirements gathering	0.5		I3	P3,P4	G1
7-	Use cases	0.5		I3		
8-	Data modeling and analysis	1	K3	I3	P1,P4	
9-	Data modeling and analysis	3	K3	I3	P1,P4	
10-	Feasibility analysis and the system proposal	1		I3	P2,P4	G1,G3,G4
	Net Teaching Weeks	**13**				

VI. Course Weekly Detailed Topics / hours / ILOs

Week No.	Sub-Topics	Total Hours	Contact Hours	
			Theoretical Hours	Practical Hours *
1	The value of systems analysis and design	2.5	2.5	
2	The components of the information systems	4	2.5	1.5
3	Developing information systems	4	2.5	1.5
4	Developing information systems	4	2.5	1.5
5	Project management	4	2.5	1.5
6	Systems analysis	4	2.5	1.5
7	**Midterm Exam**			
8	Systems analysis	4	2.5	1.5
9	Systems analysis	4	2.5	1.5
10	Requirements gathering	4	2.5	1.5
11	Use cases	4	2.5	1.5
12	Data modelling and analysis	4	2.5	1.5
13	Data modelling and analysis	4	2.5	1.5
14	Feasibility analysis and the system proposal	4	2.5	1.5
15	**Final Exam**			
Total Teaching Hours		**51**	**33**	**18**

* **No Practical/Tutorial during the first week of the semester**

VII. Teaching and Learning Methods

Teaching/Learning Method	Selected Method	Course ILOs Covered by Method (By ILO Code)			
		K & U	Intellectual Skills	Professional Skills	General Skills
Lectures & Seminars	X	All			
Tutorials	X				All
Computer lab Sessions					
Practical lab Work	X			All	
Reading Materials	X	All			
Web-site Searches	X	All		X	
Research & Reporting					
Problem Solving / Problem-based Learning	X	All			
Projects					
Independent Work	X	All			
Group Work	X		All		
Case Studies	X	All			
Presentations	X	All			
Simulation Analysis					
Others (Specify):					

VIII. Assessment Methods, Schedule and Grade Distribution

Assessment Method	Selected Method	Course ILOs Covered by Method (By ILO Code)				Assessment Weight / Percentage	Week No.
		K & U	I.S.	P.S.	G.S.		
Midterm Exam	[X]	[All]	[All]	[ ]	[ ]	[15%]	7
Final Exam	[X]	[All]	[All]	[ ]	[ ]	60%	15
Quizzes	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Course Work	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Report Writing	[X]	[ ]	[ ]	[ ]	[All]	[10%]	[10]
Case Study Analysis	[X]	[All]	[ ]	[ ]	[ ]	[5%]	[9]
Oral Presentations	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Practical	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Group Project	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Individual Project	[X]	[ ]	[ ]	[All]	[G1]	[5%]	[11]
Others (Specify):	[X]	[Lectures' Activities]				[5%]	[Every Week]
		[ ]	[ ]	[All]	[G1]		

IX. List of References

Essential Text Books	• [Measuring Information Systems Delivery Quality by Evan W. Duggan and Han Reichgelt, 2006 • Quality Assurance for Information Systems: Methods Tools, and Techniques by William E. Perry, 1991 • Quality Assurance for Information System by William E Perry, 1991]
Course notes	• [None]
Recommended books	• [None]
Periodicals, Web sites, etc.…	• [Websites relevant to the course topics]

X. Facilities required for teaching and learning

[List the facilities required
- Computer
- Board
- Data show]

Course coordinator: [Ass. Prof. Sherif Mazen]

Head of Department: Ass. Prof. Ehab Ezzat

Date: January 2015