

## INFORMATION ENGINEERING IT 454

### I – Basic Course Information

Programme(s) on which the course is given: Bachelors in Information Technology  
Major or minor element of programmes: Elective  
Department(s) offering the programme(s): Information Technology Department  
Department offering the course: Information Technology Department

Academic level: 400 Level  
Semester in which course is offered: First (Fall) Semester  
Course pre-requisite(s): Computer Networks-2 [IT322]

Credit Hours: 3  
Contact Hours Through:

- Lecture: 3.0
- Tutorial: 0.0
- Practical: 1.5
- Total: 4.5

Authorization date of course specification: 24 January 2008

### II – Professional Information

#### 1. Overall Aims of Course

Principles and fundamentals of Information Technology (IT) project management, IT project life cycle and IT project phases, IT project management process groups, IT project scope management, IT project time management, , IT project cost management, , IT project quality management.

#### 2. Intended Learning Outcomes of Course (ILOs)

##### a. Knowledge and Understanding

On completing the course students will be able to:

- a1- Describe what project management is and discuss key elements of the project management framework.
- a2- Describe the IT project life cycle and describe the five project management process groups
- a3- Describe the strategic planning process, and apply different project selection methods
- a4- Discuss the scope definition process and describe a work breakdown structure,
- a5- Define project quality management and describe the tools and techniques for quality control, such as Pareto analysis, statistical sampling, Six Sigma, quality control charts, and testing

**b. Intellectual/Cognitive Skills**

On completing the course students will be able to:

- b1-** Select IT project based on strategic planning
- b2-** Construct a work breakdown structure
- b3-** Perform activity duration estimating and schedule development and design a Gantt chart for schedule planning and tracking schedule information
- b4-** Prepare IT project cost budgeting
- b5-** Evaluate the quality of IT project

**c. Subject-Specific Practical Skills**

[On completing the course students will be able to:

- c1-** Use MS project management to design Break Down Structure
- c2-** Use MS project management to design Gantt chart
- c3-** Use MS Excel to select IT project and to prepare IT project cost budget
- c4-** Use MS Excel to prepare Pareto analysis
- c5-** Use MS Word to prepare the IT project documents

**d. General and Transferable Skills**

On completing the course students will be able to:

- d1-** Team working skills.
- d2-** Project management skills.
- d3-**
- d4-**
- d5-**

**3. Course Contents**

	<b>Topic</b>	<b>Theoretical hours</b>	<b>Practical hours</b>	<b>Total hours</b>
1-	Introduction to project management and IT project life cycle and project phases	6		6
2-	IT project management process groups and IT project management methodology	6	3	9
3-	IT project scope management	6	3	9
4-	IT project time management	6	4.5	10.5
5-	IT project cost management	6	4.5	10.5
6-	IT project quality management	6	3	9
7-				
8-				
9-				
10-				
11-				
12-				

#### 4. Teaching and Learning Methods

Teaching/Learning Method	To teach/learn the following ILO's
<input checked="" type="checkbox"/> Lectures & Seminars	a1:a5,b1:b5
<input type="checkbox"/> Tutorials	
<input checked="" type="checkbox"/> Computer-lab Sessions	c1:c5
<input checked="" type="checkbox"/> Practical lab work	c1:c5
<input checked="" type="checkbox"/> Reading Materials	a1:a5,b1:b5
<input checked="" type="checkbox"/> Web-site Searches	a1:a5,b1:b5
<input type="checkbox"/> Independent Work	
<input checked="" type="checkbox"/> Group Work	c1:c5,d1:d2
<input checked="" type="checkbox"/> Case Studies	c1:c5,d1:d2
<input checked="" type="checkbox"/> Presentations	c1:c5
<input type="checkbox"/> Simulation Analysis	
<input type="checkbox"/> Problem-based Learning	
<input type="checkbox"/> Others (Specify):	

#### 5. Assessment Methods

Assessment Method	To assess the following ILO's	Assessment Weight	Week No
<input checked="" type="checkbox"/> Midterm Exam	a1:a5,b1:b5	10%	7
<input checked="" type="checkbox"/> Final Exam	a1:a5,b1:b5	60%	14
<input type="checkbox"/> Open book Exam			
<input type="checkbox"/> Take home Exam			
<input checked="" type="checkbox"/> Quizzes	a1:a5,b1:b5	5%	5
<input type="checkbox"/> Course Work			
<input type="checkbox"/> Report Writing			
<input type="checkbox"/> Case Study Analysis	c1:c5,d1:d2	5%	9
<input type="checkbox"/> Oral Presentations			
<input checked="" type="checkbox"/> Practical	c1:c5	10%	10
<input checked="" type="checkbox"/> Group Project	c1:c5,d1:d2	10%	12
<input type="checkbox"/> Individual Project			
<input type="checkbox"/> Others (Specify):			

#### 6. List of References

6.1- Essential books (text books)

Kathy Schwalbe, "Information Technology Project Management", 3rd Ed., Thomson Course Technology, 2004

6.2- Course notes:

Powerpoint presentations for the course.

6.3- Recommended books

None

6.4- Periodicals, Web sites, etc ...

-The Guide to the Project Management Body of Knowledge (the PMBOK® Guide 2000), The Project Management Institute (PMI)

- <http://pleiad.cairo-avicenna.edu.eg/>

Avicenna website which provides Information Engineering e-learning courses.

- The Project Management Institute (PMI) is an international professional society. Their web site is [www.pmi.org](http://www.pmi.org).

#### **7- Facilities required for teaching and learning**

Computer lab connected through a network.

Softwares: Microsoft Project Management, Microsoft Office

**Course coordinator: Dr. Mohamed Abdel Dayem**

**Head of Department: Prof.Dr.Hoda Mohamed Onsi**

**Date: December 2007**