Course Specifications

Course Title:	Graduation Project 2
Course Code:	**IT 420**
Program:	**Information Technology**
Department:	**Information and computer science**
College:	**College of science**
Institution:	**Majmaah university**

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☐ Department ☑ Others ☐ **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: 10th level
4. Pre-requisites for this course (if any)**: Project (1) IT410**
5. Co-requisites for this course (if any)**: Nil**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**		
2	**Blended**		%10
3	**E-learning**		
4	**Correspondence**		80%
5	**Other**		10%

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	45
2	**Laboratory/Studio**	45
3	**Tutorial**	
4	**Others** (specify)	
	Total	
Other Learning Hours*		
1	**Study**	
2	**Assignments**	
3	**Library**	
4	**Projects/Research Essays/Theses**	
5	**Others** (specify)	
	Total	

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

In this course, each group will continue developing their software systems started in IT420. The students are supposed to apply design and engineering skills in the accomplishment of a single goal. In this context the skills mentioned may be in the general area of design and engineering in its broadest sense, or may be very specifically related to particular tools. At the end of the semester, each group must submit a final report, which documents completely the information system from the problem definition phase to the implementation phase and contains a user manual the information system.
Team work, leadership, communication and writing skills are all important ingredients for a successful project..

2. Course Main Objective

1	Ensure that the graduate student is able to use his knowledge of his writing, rhetoric, research and organizational abilities.
2	Give the student a chance to apply what he has learned and implement it on the ground.
3	Give the student an opportunity to apply the ethics of the profession before actually joining the work.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge:**	
1.1	Learn new tools and technologies and understand of best practices and standards and their application	
2	**Skills :**	
2.1	Design, implement, develop and evaluate the computer-based system of the project to meet desired needs	
2.2	Use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies.	
2.3	Integrate IT-based solutions into the user environment effectively.	
2...		
3	**Competence:**	
3.1	Function effectively on teams to accomplish a common goal and communicate effectively with a range of audiences.	
3.2	Use current techniques, skills, and tools necessary for computing practice	

C. Course Content

No	List of Topics	Contact Hours
1	Feasibility study: To produce a feasibility study document that evaluates the costs and benefits of the proposed computer based application.	6
2	Planning and requirement analysis and specification: To produce an SRS document identifying the qualities required of the application, in terms of functionality, performance, ease of use, portability, and so on	9
3	Design and Specification: To produce an document to transform the requirements specified in the document into a structure that is suitable for	9

	implementation in some programming language	
4	Coding, Module Testing, Integration and System Testing: The output of the coding and module testing phase is an implemented and tested collection of modules. During the integration and system testing phase, the modules are integrated in a planned manner. The objective of system testing is to determine whether the software system performs per the requirements mentioned in the document	18
5	Delivery and Making Corrective Maintenance: The system is distributed to the users. Corrective maintenance means repairing processing or performance failures or making changes because of previously uncorrected problems.	3
...		
Total		

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge**		
1.1	Learn new tools and technologies and understand of best practices and standards and their application.	Meetings with supervisor, Group Discussions	Presentations, Report Writing, Demonstrations
1.2			
2.0	**Skills**		
2.1	Design, implement, develop and evaluate the computer-based system of the project to meet desired needs.	Meetings with supervisor, Group Discussions	Presentations, Report Writing, Demonstrations
2.2	Use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies		
…	Integrate IT-based solutions into the user environment effectively.		
3.0	**Competence**		
3.1	Use current techniques, skills, and tools necessary for computing practice		Presentations, Report Writing, Demonstrations
3.2	Function effectively on teams to accomplish a common goal and communicate effectively with a range of audiences.		
…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Supervisor weekly meeting	Every week	10%
2	First presentation		10%
3	Second oral presentation		10%
4	Poster presentation		0%
5	Theses discussion		40%
6	Supervisor evaluation		30%
7			
8			

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

The contact with students by e-mail, mobile, office telephone and website.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	It depends on the project.
Essential References Materials	It depends on the project.
Electronic Materials	It depends on the project.
Other Learning Materials	It depends on the project.

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	□ Computer Labs □ Library
Technology Resources (AV, data show, Smart Board, software, etc.)	AV, data show, Smart Board, software
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of progressing and assessment,	Faculty, Program Leaders, committee members	Direct
Extent of achievement of project learning outcomes,		
Quality of learning resources		

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	