Zarqa University
Faculty
Department: Software Engineering
Course title: Project 1 (1503390)

Instructor:
Lecture's time:
Semester:
Office Hours:

Course description:

The final year project gives the student the opportunity to apply knowledge acquired in the early years. It aims to develop and measure the capabilities of a student to analyze and solve complex problems. Projects are assigned on a team basis, and are normally proposed by lecturers of the department. However, a student may propose a topic or an area of his/her own research interest. Projects should be problem oriented relevant to the program of study. Students are encouraged to have some original contribution. Each Team will be assigned a supervisor who is in charge of the entire project. In this part of the project the student is expected to develop the skills in gathering information, analyzing and specifying problem requirements. A literature survey and initial plan is written up by the middle of the semester and a requirement specification document is submitted by the end of the semester. A final oral representation before faculty members is given for assessment and to suggest modifications. It covers the design and implementation phases of the project. The design document is to be submitted and reviewed by the supervisor by the middle of the semester. A final design and implementation report is submitted and an oral presentation including a public demo is evaluated by a committee of faculty members.

Aim of the course:

The course objective is to encourage students to apply their accumulated learning, knowledge and experience to produce a high quality solution (a Product) that is applicable in a real life situation.

Intended Learning Outcomes: (ILOs)

- **A.** To develop and measure the capabilities of a student to analyze and solve complex problems.
- **B.** The student is expected to develop the skills in gathering information, analyzing and specifying problem requirements.
- **C.** The student should be able to design and implementation report

Course structures:

Week	Credit Hours	ILOs	Topics	Teaching Procedure	Assessment methods
1	3	A1	Graduation Project (GP) initiation How to choose your project and colleagues Setting tasks, milestones and implementation plan	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Midterm d) Activity file
3,4	4	A1, A3	Project Proposal (Vision Document/ Feature list) *At this stage the Project Proposal will be sent to GP committee for evaluation and feedback. In case of rejecting a project idea, the course*	Presentation methods and techniques, Sources of information and	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation

				Instructional Aids	a) Class Participation b) Midterm exam d) Activity file
4,5	4	A1,A2, A3	• Requirements elicitation	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Midterm exam d) Activity file
5,6	3	B1, C1	Requirements Analysis	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Midterm exam d) Activity file
7,8,9	3	B2, B3	Data Flow Diagram(DFD)/ level 1 and level 2, System Architecture	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Midterm exam d) Activity file
10,11	3	B2, B3	DFD/ level 1 and level 2, System Architecture	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b Midterm exam d) Activity file
12,13	3	B2, B3	Entity Relationship (ER) Diagram, Data Dictionary	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Midterm exam d) Activity file
14,15	5	C2, C3	Use case Diagram, Use Case Description	Presentation methods and techniques, Sources of	Diagnostic tests to identify the students level and areas of weakness

The first row data cell (top) reads: *instructor will work closely with the student to improve his proposal*

				information and Instructional Aids	Formal (stage) evaluation a) Class Participation bFinal exam d) Activity file
15	1	D1, D2	Hierarchical Overview, Network Diagram	Presentation methods and techniques, Sources of information and Instructional Aids	Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Final exam d) Activity file
			Dummy User Interface		Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Final exam d) Activity file
			Testing Methodology & test cases		Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Final exam d) Activity file
			Project Management Plan		Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Final exam d) Activity file
			Writing the Project Specification Document **(Introduction, Background, Analysis, Design**) chapters of the final report		Diagnostic tests to identify the students level and areas of weakness Formal (stage) evaluation a) Class Participation b) Final exam d) Activity file
			Completing the Project Specification Document		

References:

1- *Systems Analysis and Design, 9th Edition,* Gary B. Shelly, Thomas J. Cashman and Harry J. Rosenblatt, ISBN-10: 0538481617 | ISBN-13: 978-0538481618, Course Technology, 2011

   Developing Software with UML: Object- Oriented Analysis and Design in Practice, Bernd Oestereich, Addison Wesley, 2002

Assessment Methods:

Methods	Grade	Date
Attend meetings	20%	Week 1
Team formation	8%	Week 2
Choose Admin	10%	Week 3
work plan	10%	Week 4
Report Writing includes: • Introduction • Analysis • Design • Selection of appropriate software	10%	Week 5,6 Week 7,8 Week 9,10 Week 11,12,13
Admin evaluation	12%	Week 14,15
presentation	30%	Week 16