Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Hamdaniya
College: Education
Department: Computer Science
Stage: Third
Subject: Software Engineering
Lecturer name:

Course Weekly Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Introduction, S/W definition		
2		S/W characteristics, S/W applications		
3		S/W Crisis, S/E definition		
4		Characteristics of well engineering, goals of S/W.		
5		S/W life Cycle		
6		Linear Sequential model.		
7		Prototyping model.		
8		Incremental model Spiral model.		
9		Requirements analysis & definition, Requirements Specification.		
10		Software Specification, Software Requirements document.		
11		Formal Requirements: structure analysis.		
12		Analysis model objectives.		
13		The elements of analysis model .		
14		Data modeling.		
15		Creation of ERD, DFD .		
16		Exam		
Half-year Break				
17		Software design: Software design definition.		
18		Activities of S/W design: Data Design, Architectural design.		
19		Interface design, Procedural design.		
20		Effective modular design: Functional independence, Cohesion, Coupling.		
21		Introduction to object oriented design.		
22		Top – down & Bottom – up design methods.		
23		Real-time design concepts .		
24		Software testing: the primary objective of S/W testing, system testing goals.		

25		Unit-testing, integration testing, system testing.		
26		Categories of system testing techniques: Black& White- box testing.		
27		Alpha testing, Beta testing.		
28		Project planning.		
29		Team organization & management.		
30		Quality Assurance :Quality Concept		
31		SQA activities, Software reliability		
32		Exam.		