Al-Imam Muhammad Ibn Saud Islamic University

College of Computer and Information Sciences

Course Syllabus [Fundamentals of n-Tier Architectures]

Course Code	*Course Name.*	*Credit Hours*	*Lec.*	*Lab*	*Prerequisites*
IT331	*Fundamentals of n-Tier Architectures*	*3*	*2*	*2*	*IT320, IT390*

Course Description:

This course examines the evolution of the n-tier database application development, the roles of the various tires in the n-tier architectures. It explores the options for marshaling data across tiers and presents advantages of using component-oriented designs.

Course Topics:

Week	Tentative Schedule
Week 01	Overview of N-Tier Architecture: A Tiered Approach to Development,
Week 02	Implementation of N-Tier, Reusable Components, How to Achieve N-Tier
Week 03	Creating N-Tier Services
Week 04	Two-Tier Sample Refactored Form Methods. **+ assignment**
Week 05	Two-Tier Sample Refactored Form Methods.
Week 06	The Data Layer Component [First Exam]
Week 07	The Data Layer Component
Week 08	Data Classes + **Mid-term exam**
Week 09	Business Classes
Week 10	Business Classes [Second Exam]
Week 11	Alternate N-Tier Implementation
Week 12	Alternate N-Tier Implementation
Week 13	N-Tier and Web Services
Week 14	N-Tier and Web Services
Week 15	
Week 16	**[Final Exam]**

Textbook and Resources:

Main Textbook:

Fundamentals of N-Tier Architecture, Paul D Sheriff, 3rd edition, PDSA, Inc., 2006.

Other Resources

Will be provided during the lectures.

Project and Assignments

Will be provided during the last weeks.

Grade Distribution

Quizzes	10 %
Midterm Exam	20 %
Assignments	10 %
Lab contribution and Exams	20 %
Final Exam	40 %