

Course Title: Information Processing Techniques

Course Code: CS4042

Credit Hours: 3

Instructor: Abeeha Sattar

Course Objectives:

The objective of the course is to introduce specific application development tools and technology in application development with windows, web and mobile platform using .NET framework.

Reference Book:

Pro C# 10 With .Net and .Net Core by Andrew Troelsen and Philip Japikse (Apress Publications)

Tentative Weekly Plan

<u>Week</u>	<u>Topic</u>
1.	Course Introduction Introduction to C#, (Console and Windows) OOP Revision
2.	Azure DevOps (Repo / Work Items) ASP.Net, Post-backs Project Proposal (Milestone)
3.	Collections in .NET Framework Lab # 1 Assignment # 1
4.	XML Serialization and Deserialization Windows Services
5.	Project Prototype (Milestone) Azure Functions JSON Distributed Systems Architecture
6.	Midterm I
7.	Web Services Broker/Proxy Architecture Assignment # 2
8.	WEB API WCF
9.	Multi-threaded applications Reflections Lab # 2

10.	Project API (Milestone) ADO.NET; SQL Queries
11.	Midterm II
12.	LINQ; Assignment # 3
13.	Design Patterns Lab # 3
14.	File Streaming Database
15.	Building scalable applications Revision
16.	Project Presentations and Demonstration
17.	Final Exam

Grading Scheme

Programming Assignments	10 %
Labs	3 %
Project	12 %
Midterms (2)	25 %
Final	50 %