

Course Title: Information Processing Techniques

Course Code: CS423- CS Elective

Credit Hours: 3

Instructor: Murtaza Munawar Fazal

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.

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 %