Week-1	Testing Techniques, Black Box Testing Technique

Course Outline

Course Title:	Software Testing	**Course Code:**	509
Credit Hours:	3+0	**Prerequisites:**	None
Course Instructor:	Waheed Javed		

Teaching Methodology: Lectures, Assignments, Quizzes, labs, Projects, Presentations, etc. Major component of the course should be covered using conventional lectures

Course Assessment:
At least 02 assignments (01 assignment before mid exam and 01 before final exam)
At least 02 quizzes (01 quiz before mid exam and 01 before final exam)
Mid-semester examination (Conducted after 7 weeks)

Course Learning Outcomes (CLO's)

The goal of a software testing course is to equip students with the knowledge and skills needed to ensure that software products meet high-quality standards and are reliable, secure, and effective.

Week-2	White Box Testing and Grey Box Testing Techniques
Week-3	Quality Assurance Planning and Execution
Week-4	Automated Testing Topics include constructing a framework
Week-5	Scripting Techniques,
Week -6	Generating a Test Data
Week-7	**Mid-Term Examination**
Week-8	Generating Test Architecture
Week-9	Pre/Post Processing
Week-10	Test Maintenance and Job Specific Metrics
Week-11	Current research in Software Testing and Quality Assurance
Week-12	Revision
Week-13	Revision
Week-14	**Final term examination**

Recommended Books & Readings:

1. *Software Quality Assurance: Integrating Testing, Security, and Audit* (Internal Audit and IT Audit), Abu Sayed Mahfuz, Auerbach Publications, 2016.
2. *Practical Model-Based Testing: A Tools Approach,* Mark Utting and Bruno Legeard, Morgan Kaufmann Publishers Inc., San Francisco, CA, 2006.
3. *Software Quality Engineering, Testing, Quality Assurance, and Quantifiable improvements*, Jeff Tian, IEEE Computer Society, 2005.
4. *Introduction to Software Engineering*, P Ammann and J Offutt, Cambridge University Press, 2008.