

BS Chemistry Semester-V					
Programme	BS Chemistry	Course Code	CHEM- 362	Credit Hours	1
Course Title	Applied Chemistry (Lab)		Course Type	Major (Elective)	
Course Introduction					
This course content will increase the working skills of students regarding water testing labs and Polymer industries. Preparations: Dentifrice, Thermo and Thermosetting polymers Titrimetry: Estimation of Residual and Available Chlorine, Acidity of Vinegar, Acidity of Sulphuric acid Flamephotometry: Determination of the Sodium in water, Determination of Potassium in water, Simultaneous determination of sodium and potassium in water					
Learning Outcomes					
On the completion of the course: - Students are expected to become familiarized with the concepts of general chemistry - This will enable them qualify for basic to moderate level jobs involving general knowledge of chemistry - The obtained knowledge shall also enable the students to enter into various entrepreneurial activities involving general introduction to chemistry - Students are able to understand the concept of GLP and GMP					
Course Content			Assignments/Readings		
Week 1	Preparation of Thermo and Thermosetting plastics		Lab work / Notebook		
Week 2	Preparation of Dentifrice		Lab work / Notebook		
Week 3	Estimation of Residual Chlorine		Lab work / Notebook		
Week 4	Estimation of Available Chlorine		Lab work / Notebook		
Week 5	Acidity of Vinegar		Lab work / Notebook		
Week 6	Acidity of Vinegar		Lab work / Notebook		
Week 7	Acidity of Sulphuric acid		Written Assignment		
Week 8	Acidity of Sulphuric acid		Lab work / Notebook		
Week 9	Mid Term Examination		Lab work / Notebook		
Week 10	Determination of Sodium in water		Lab work / Notebook		

Week 11	Determination of Sodium in water	Lab work / Notebook
Week 12	Determination of Potassium in water	Lab work / Notebook
Week 13	Determination of Potassium in water	Lab work / Notebook
Week 14	Simultaneous determination of sodium and potassium in water	Lab work / Notebook
Week 15	Simultaneous determination of sodium and potassium in water	Quiz
Week 16	Review and Viva Voce	Lab work / Notebook
Textbooks and Reading Material		
1. Applied Chemistry, Haq Nawaz Bhatti and Muhammad Salman, 2017, Caravan Book Publisher, Pakistan. 2. Water Supply and Sewerage, T.J.McGhee, McGraw Hill Book Co. New York.(1991) 3. Hand Book of Industrial Chemicals, By SIRI Board of Consultants and Engineers, 4. Shereve's Chemical Process Industries, 5th Ed.1975 by G.T.Austin McGraw Hill Book Co. New York. 5. Industrial chemistry, B. K. Sharma Krishna Prakashan Media (P) Ltd., Ed-15 (2006) 6. Applied.....?		
Teaching Learning Strategies		
1. Lectures 2. Group Discussion 3. Laboratory work 4. Seminar/ Workshop		
Assignments: Types and Number with Calendar		
1. Written 7 th week 2. Quiz 15 th week		