Republic of Iraq
The Ministry of Higher Education & Scientific Research

University: Muthanna
College:Science
Department:Chemistry
Stage: First
Lecturer name: Zaman Sahb Mehdi
Academic Status: Lecturer
Qualification: MSc
Place of work: Chemistry department

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Teaching plan for the semester form

Course Instructor	Zaman Sahb Mehdi				
E_mail	ss.zaman@yahoo.co.uk				
Title	Analytical Chemistry II				
Course Coordinator					
Course Objective	Study of fundamental of volumetric analysis and application it's for for determination of acids, bases, protein, fatty acid, metal ions, inions, oxidants, and reduction, and many other specie.				
Course Description	Study of principle, calculating, methods of finding end point, titration curve, and applications for the following reactions. • Acid – base titration. • Complexometric titration. • Precipitation titration. • Redox titration.				
Textbook	Fundamental of Analytical chemistry				
References	Modern of Analytical Chemistry Harvey2000 Analytical Chemistry, Christina 2010				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	(27%)	(13%)		----	(60%)
General Notes					

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Notes	Experimental Part	Syllabus	Date	Week
	Review the Calculations of quantitative analysis, the principle , requirement and glassware used In titration reaction	Introduction to Titration	20/2/2019	1
	Preparation solution 0.1 N approximately HCl and neutralization	principle of Acid Base Titration	27/2/2019	2
	Preparation solution 0.1 N approximately NaOH and neutralization	Calculations of strong acid –Strong base Titration	6/3/2019	3
	Determination carbonate from Mixture (double titration)	Calculations of Weak acid –Strong base Titration	13/3/2019	4
	Determination of ammonia in ammonium salts	Calculations of strong acid –Weak base Titration	20/3/2019	5
	Monthly test	Acid Base Titration Application	27/3/2019	6
	Determination the acidity of vinegar	Precipitation titration and titration curve	3/4/2019	7
	Determination chloride ion in tap water by Mohr method	Calculation of Precipitation titration	10/4/2019	8
	Determination chloride ion by Volhard method(back titration)	Methods of determination of end point(application)	17/4/2019	9
	Determination chloride ion by Faigan method	Complexomtric titration and titration curve	24/4/2019	10
	Determination the hardness tap water with EDTA	Calculation of Complexomtric titration , determination of end point	1/5/2019	11
	Determination of Fe^{+2} by reduction – oxidation reaction	Quantitative application	8/5/2019	12
	Final exam	Reduction oxidation titration	15/5/2019	13
		Determination of end point , Quantitative and qualitative application	22/5/2019	14
		Solving problems	29/5/2019	15

Instructor Signature: **Head of Department** **Dean Signature:**