Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

بسم الله الرحمن الرحيم

University: Diyala

College: Engineering

Department: Chemical Engineering

Stage: ٢rd

Lecturer name: Ali Alwan Hasan
Qualification: M.Sc. Chemical Eng.

Place of work: Chemical Eng, Dept.

Ministry of Higher Education & Scientific Research

Flow up of implementation celli pass play

Course Instructor	Ali Alwan Hasan				
E-mail					
Title	Analytical Chemistry				
Course Coordinator	Annually				
Course Objective	This subject is used to teach students the chemical analysis processes in Chemical Engineering from practical side view.				
Course Description	Chemical analysis process as described below:				
Textbook	Modern Analytical Chemistry , David Harvey , ٢٠٠٠				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As(٣٠%)	As(١٠%)	As(١٠٪)	-	As(٥٠%)
General Notes	٢ hrs theoretical and ٢ hrs practical				

Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

وزارة التعليم العالي والبحث العلمي
Ministry of Higher Education & Scientific Research

University: Diyala

College: Engineering

Department: Chemical Engineering

Stage: ٢rd

Lecturer name: Ali Alwan Hasan

Qualification: M.Sc. Chemical Eng.

Place of work: Chemical Eng, Dept.

Course Weekly Outline

Week	Date	Topes Covered	Lab. Experiment Assignments	Notes
١	٢١/ ٩ /٢٠١٤	Introduction to Analytical Chemistry		
٢	٢٨ / ٩ / ٢٠١٤	Stoichiometric calculations		
٣	٥ / ١٠ / ٢٠١٤	Chemical coefficient		
٤	١٢ / ١٠ / ٢٠١٤	Molarities		
٥	١٩ / ١٠ / ٢٠١٤	Normality		
٦	٢٦ / ١٠ / ٢٠١٤	Titration		
٧	٢ / ١١ / ٢٠١٤	Density		
٨	٩ / ١١ / ٢٠١٤	Equilibrium in the acids		
٩	١٦ / ١١ /٢٠١٤	Equilibrium in the bases		
١٠	٢٣ / ١١ / ٢٠١٤	pH		
١١	٣٠ / ١١ / ٢٠١٤	Graphs of titration		
١٢	٧ /١٢ / ٢٠١٤	Indicators of bases		
١٣	١٤ / ١٢ / ٢٠١٤	Indicators of acids		
١٤	٢١ / ١٢ / ٢٠١٤	Equilibrium in precipitation		
١٥	٢٨ / ١٢ / ٢٠١٤ - ٤/١/٢٠١٥	Solubility		
١٦				
Half – year break				
١٧	١٥-٢٦/٢/ ٢٠١٥	Partial precipitation		
١٨	١-١٢/٣/٢٠١٥	Analysis using oxidation		
١٩	١٥-٢٦/٣/٢٠١٥	Electromotive force		
٢٠	٢٩٣/٢٠١٥ - ٩/٤/٢٠١٥	Use of the half-cell potentials		
٢١	١٢-٢٣/٤/٢٠١٥	Nernst equation		
٢٢	٢٦/٤/٢٠١٥ - ٧/٥/٢٠١٥	Measure of concentration by potential of the cell		
٢٣	١٠-٢٨/٥/٢٠١٥	Selected inorganic materials		
٢٤	٣١/٥/٢٠١٥ - ٤/٦/٢٠١٥	Inorganic reactions		
٢٥				
٢٦				
٢٧				

٢٨			
٢٩			
٣٠			
٣١			
٣٢			

INSTRUCTOR Signature: A. A. H.   **Dean Signature:**