Course Specifications

General Information

Course name	Analytical Chemistry(1)
Course number	CHEM2306
Faculty	
Department	
Course type	Major Needs
Course level	2
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - 1- learning the principles of analytica chemistry and its errors of chemical analysis and the typical steps of quantitative analysis and the pretreatment for sample analysis 2- studing different concentration expressions and calculations 3-learning the principles of quantitative analysis methods

Intended Learning Outcomes

Knowledge and Understanding

* 1- provide the students informations how to deal errors in chemical analysis 2- give the students an idea about the calculation of the concentration and the percentage of analyte in different wayes and differents types concentration expressions 3- provide the students informations about different methods of quantitative analysis including gravimetric analysis and titrimetric methods of analysis.

Course Contents

1 - This course covers the principles of analytical chemistry including errors in chemical analysis, statistical evaluation of analytical data, gravimetric methods of analysis, titrimetric methods of analysis, aqueous solution chemistry, activities and activity coefficients, also study the ionic strength effect on concentration and Debye-Huckel theory, a systematic method for performing equilibrium calculations and precipitation titration of silver nitrate including Mohr, Volhard and Fajan methods.

Students Assessment

Assessment Method	TIME	MARKS
1- First mid term exam 2- Second mid term exam 3- Ctivities and attendence4- final exam 50%		Total 100%

Books and References

Essential books	Fundamentals of analytical chemistry Skoog/ West/ Holler