

Course Specifications

Programme(s) on which the course is given B.sc.chemistry

Major or Minor element of programmes Major

Department offering the programme chemistry

Department offering the course chemistry

Prerequisite: CH176

Academic year / Second

Date of specification approval 2013

A- Basic Information

Title: Practical Analytical Chemistry (II) Code: CH 278

Credit Hours: 2

Lecture: 0

Tutorial: 4

Practicals: 2 Total:

2

Teaching staff:

B- Professional Information

1 – Overall Aims of Course

This course learns the graduates how can evaluate concentration of unknown solution by titration method.

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

After completing the course the graduate should be able to

A1-Know different types of reactions in volumetric analysis and can prepare different solutions of different concentrations.

b- Intellectual Skills

The graduate will be able to

B1- Determine the end point of the volumetric reaction and can determine the concentration of different solutions.

c- Professional and Practical Skills

The graduate will be able to

C1-use appropriate lab. Equipments and tools to determine the concentration of unknown samples.

d- General and Transferable Skills

1-Enhance the preparing and titrating of different solutions.

3- Contents

Topic	No. of hours	Lecture	Tutorial/Practical
Introduction of volumetric analysis	4	1	
Neutralization reactions	12	3	
Precipitation reactions	8	2	
Oxidation reactions	8	2	
Complex formation reactions	8	2	
revision	4	1	

4- Teaching and Learning Methods

1-Lectures.

5- Graduate Assessment Methods

Written and practical examination

Assessment Schedule

Assessment 1 short exam Week every two weeks

Assessment 2 mid-term Week 7th week

Assessment 3 final-term Week 13th week

Assessment 4 Week 15

Weighting of Assessments

Mid-Term Examination 20 %

Practical Examination 60 %

Semester Work 20 %

Other types of assessment %

Total 100%

6- List of References

a- Essential Books (Text Books)

1- Vogel

2- Alexeyev

**7- Facilities Required for Teaching and Learning
Experimental lab...**

Course Coordinator:

Head of Department: Prof. Dr. Adel Nassar

Date: / /