## **Course Description Form**

1. Course Name: General Chemistry			
2. Cour	se Code: CHEM271		
3. Seme	ester / Year: 2023-2024		
	,		
4. Desci	ription Preparation Date: 21/3	3/2024	
5. Avail	able Attendance Forms: Class	Attendance	
6. Numl	ber of Credit Hours (Total) / Nu	mber of Units (Total) 30 hr	
7. Cour	se administrator's name (me	ntion all, if more than one name)	
	e: Assist. Prof. Dr. Atheel Hassa	•	
Emai	l: atheel.alwash@nahrain.univ	7.edu.iq	
		•	
8. Cours	se Objectives		
Course Objectives		<ol> <li>Develop and understand the uses of analytical chemistry.</li> <li>Understanding the role of chemistry in quantitative analysis</li> <li>The ability to understand the chemical methods used</li> <li>Understanding of occupational safety responsibilities that must be followed</li> <li>Understand some basics of organic chemistry such as • Structure and properties of alcohols, alkane alkanes</li> </ol>	
9. Teaching and Learning Strategies			
Strategy	1 - Introduction to the main definitions of atom 2- Understanding the concentration expresion 3- Understanding the principles of calibration 4- A general introduction to acid and base 5. Understand the chemical equilibrium reaction 6- The basics of the gravimetric method 7- Introduction to the basics of organic chemistry		

## 10. Course Structure

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	2	Introduce students to the basic concepts of pollution	Structure of atoms	White board to insure the student interaction	Oral and written exams
2	2	Introduce students to the basic concepts of pollution	Molarity, Molality expression	White board to insure the student interaction	Oral and written exams
3	2	Introduce students to the basic concepts of pollution	Normality expression	White board to insure the student interaction	Oral and written exams
4	2	Introduce students to the basic concepts of pollution	Tutorial	White board to insure the student interaction	Oral and written exams
5	2	Introduce students to the basic concepts of pollution	Acid and bases, pH	White board to insure the student interaction	Oral and written exams
6	2	Introduce students to the basic concepts of pollution	Mid exam	White board to insure the student interaction	Oral and written exams
7	2	Introduce students to the basic concepts of pollution	Titration	White board to insure the student interaction	Oral and written exams
8	2	Introduce students to the basic concepts of pollution	Chemical equilibrium	White board to insure the student interaction	Oral and written exams
9	2	Introduce students to the basic concepts of pollution	Factors effecting chemical equilibrium	White board to insure the student interaction	Oral and written exams
10	2	Introduce students to the basic concepts of pollution	Tutorial	White board to insure the student interaction	Oral and written exams
11	2	Introduce students to the basic concepts of pollution	Mid Exam	White board to insure the student interaction	Oral and written exams

12	2	Introduce students to the basic concepts of pollution	Gravimetric method	White board to insure the student interaction	Oral and written exams
13	2	Introduce students to the basic concepts of pollution	Gravimetric method	White board to insure the student interaction	Oral and written exams
14	2	Introduce students to the basic concepts of pollution	Open discussion preparing for final test	White board to insure the student interaction	Oral and written exams
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## 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

- 50 Score of the mid exams
- 25 Score for quizzes
- 15 interaction within the class
- 10 for home works

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if ar	Fundamental of analytical chemist
,	D.A. Skoog, D. M.West,
	F. J. Holler and S. R. Crouch, 8th e
	2004, Brooks/Cole.
	·
Main references (sources)	Chemistry A First course, Jacqueline
	Kroschwitz, Second Edition
Recommended books and references	Fundamentals of chemistry: Four
(scientific journals, reports)	Edition, David E. Goldberg
Electronic References, Websites	Different sources from internet

