Department of General Science

College of Basic Education

Salahaddin University-Erbil

Subject: Course Book of

General Chemistry/First Stage

Lecturer's name: Gulkhater Hammad Sharif

Academic Year: 2022- 2023

Course Book

1. Course name	**General Chemistry**
2. Lecturer in charge	**Gulkhater Hammad Sharif**
3. Department/ College	**General Science /Basic Education**
4. Contact	**e-mail: gulkhater.sharif@su.edu.krd** **Tel: 07504750226**
5. Time (in hours) per week	**4 hours(Theoritical)**
6. Office hours	**30**
7. Course code	
8. Teacher's academic profile	**1985-1986 BSc in Chemistry** **1991 published a research in Journal of the Iraqi chemical society ,subject of the research (The stability constants and thermodynamic functions of Palladium II (Pd II) complexes with Salicylic acid its derivatives** **1986-2001 assistant chemist** **2001 – 2004 MSc in Analytical Chemistry** **2004 till now Lecturer in General Science** **Have been teaching these subjects:** • **Analytical chemistry (theory lectures of second stage)** • **Analytical chemistry (practical of second stage)** • **Organic chemistry (theory lectures of third stage)** • **Industrial chemistry (theory lectures of third stage)** • **Scientific debate (theory lectures of first stage)** **Had a training course about Methods of teaching , a course about PowerPoint , Excel , Microsoft word.**
9. Keywords	**Chemistry ,Matter, pure Substance, Element, Atom, Physical Property, Chemical Property, Periodic Table, Atomic Number, Mass Number, Electronic Configaration, Orbital, Organic Chemistry, Carbon, Alkanes , Alkenes, Alkynes, Biochemistry, Lipids.**
10. Course overview: This course provides an introduction to the general chemistry and definition of matter, atom, and physical , chemical changes , teach the students property of elements in groups and periodes in Periodic Table , property of Alkanes , Alkenes , and Alkynes.	

11. Course objective:

The purpose of this course to:

- ❖ Teaching the student electronic configuration of elements
- ❖ Be able to name all organic compounds
- ❖ The student have information about periodic table

12. Student's obligation

- ❖ In each practical session a quiz will be done.
- ❖ Homework will be given to the students and bring it next session.

13. Forms of teaching

. The data show and whiteboard are used

14. Assessment scheme.

Semester	Theory	Practical degree %		
		Seasonal Exam.	Quizzes	Dailey Activities
1st semester				
2nd semester	30 with 10 marks			
Final Exam.	60			
Total 100%				

15. Student learning outcome:

- The student will learn about atom, matter and nomenclature of organic compounds.
- The student will have information about periodic table

16. Course Reading List and References:

- Key references:

1- Brown,Th.L.;Lemay,H.E.;&,Bursten.B.E.(Chemistry the century science) (2006),tenth edition,USA.

2- Stoker,H.S.(Introduction to Chemical principles),(eighth edition).

3- Sackheim.G.I,;Lehman.D.D.,(Chemistry for the health

science),(1998),eighth edition.

4- Basic inorganic chemistry ,by F.Albert cotton.

5- Scientific webs and journals .

17. The Topics:	**Lecturer's name**
	Lecturer's name: Gulkhater Hammad Sharif (4 hrs)
Course Book and some information about the Chemistry	
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Introduction of chemistry science The matter Classification of matter --- Pure substance Element Atom Properties of matter	
Physical and chemical changes Sub-Atomic particles Isotope Definition of mass number Definition of atomic number	
Electronic configuration of some elements Quantum numbers --- Periodic table Periods and groups --- Organic chemistry	

Carbon --- Classification of hydrocarbons Aliphatic hydrocarbons Alkanes --- Alkenes Alkynes --- Cyclo – compounds Aromatics Substituted hydrocarbons …….. Alcohols Ethers ……. Aldehyde Ketones …… Organic acids Esters ,Amines ---	--- --- --- --- ---

18. Practical Topics (If there is any)	
21. Peer review	