Republic of Iraq
The Ministry of Higher Education & Scientific Research

University:Al Muthanna
College: Science
Department: Chemistry
Stage: First
Lecturer name: Azal Shaker
Academic Status: Assistant professor
Qualification: Ph.D
Place of work: Chemistry dep.

Course Weekly Outline

Course Instructor	Azal Shaker				
Email	**azilshker@mu.edu.iq**				
Title	Inorganic chemistry				
Course Coordinator	The first course				
Course Objective	Students will understand the development of the structure of atom , evidence for various atomic model , electron energy levels , atomic spectra , quantum numbers , periodic table and periodic Law.				
Course Description	This is theoretical course designed to describe and explain the historical development of atomic structure . it reviews various model about the structure of atom and how these models related to some aspects of atom , e.g. atomic spectra . the course further provide understanding of the dual property of the electron and how this leads to the quantum mechanical model of atomic structure , Furthermore , the pattern of electron distribution in atom will be explained as well as how to specify a particular electron in an atom				
Textbook	Inorganic chemistry Thanaa al hassany				
References	Inorganic chemistry(Huhhey) Shriver and Atkins Inorganic chemistry , 5th ed. , 2010				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As (40%)	(0%)	(0%)	----	As (60%)
General Notes					

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week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	2022/11/2	Atomic structure , Dalton , Thomson , and Rutherford atomic models		
2	2022/11/9	Quantum theory, Electromagnetic radiation, Photoelectric effect, Black body		
3	2022/11/16	Atomic spectra and electromagnetic spectrum, Emission spectra, Absorption spectra, Hydrogen atom spectra		
4	2022/11/23	Bohr atomic model , Application Bohr theory on atomic similar Hydrogen		
5	2022/11/30	Somerfield theory, Zeeman effect ,effect of spin electron , Quantum number , physical description of atomic orbitals		
6	2022/12/7	Wave mechanics, Uncertainty principle, Schrodinger Equation, Similar orbitals, nonSimilar orbitals		
7	2022/12/14	The Arrangement of electrons in atoms , Pauli exclusion principle , Hund first rule		
8	2022/12/21	Periodic Table, typical element , the representative elements , the main transition elements		
9	2022/12/28	Russel –Sounders symbols (Term symbols) ,examples , Shielding ,Ionization energy		
10	2023/1/4	Effective nuclear charge		
11	2023/1/11	Electron affinity , electronegativity		

Instructor Signature:
Azal shaker

Dean Signature: