

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	General chemistry for health sciences
Course number	MDCN1218
Faculty	
Department	
Course type	College Needs
Course level	1
Credit hours (theoretical)	2
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

- 1 - this course is intended to give the student the basic concepts of chemistry as stiochemistry, chemical formulas, chemical structures, balanced chemical equations and the basic concepts of equilibrium and kinetics.

Course Contents

- 1 - This course begins with topics such as the mole concept, stoichiometric determination, structure of the atom and the atomic theories, chemical formulas, limiting reactant, electronic configuration of the elements, It includes the periodic table beside the periodic properties of the atoms such as atomic size, ionization energy and electron affinity. 2 The student is also introduced to study the principle of chemical bonding in general terms and stresses the importance of applying theory to practice such as Lewis structure, VSEPR, Valence bond and molecular orbital theories. 3 The properties of solids, liquids, solutions, studying of the intermolecular forces between solid and liquid molecules, reactions in aqueous solutions such as redox reaction, precipitation reactions and neutralization reaction, kinetics, equilibrium, electrochemistry and redox reaction. 4 The student is introduced to techniques in qualitative analysis given an introduction in analytical chemistry through studying the acids-bases theories, ionic equilibria, calculating the pH of the solutions, principles of buffer solutions and solubility product, and finally the elements of thermodynamics and thermochemistry

Books and References

Course note	CHEMISTRY, TENTH EDITION Raymond ChangAmericas, New York, NY 10020. Copyright © 2010
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