



Palestine Technical University-Kadoorie Course Syllabus



Faculty:			
Course Title:	Physical Chemistry(II)	Course Number:	15050341
Year:	2015/2016	Semester:	Second semester
Department:	Chemistry	Designation:	
Prerequisite(s):	Physical Chemistry(I) 2315050241		
Instructor:	Dr. Lamees Z. Majjad		
Instructor's e-mail:	lameesmajjad@yahoo.com		
Office Hours:	10-11 sun, tues, thur.+ 12:30-2 mon, wed.		
Class Time:	9:30-11 mon, wed.	Class Room:	536
Course description:	This course is designed to give students a working knowledge of the most important physical chemistry principles concerning thermodynamics, Kinetics, reaction mechanism and processes at surfaces.		
Textbook(s):	Physical Chemistry, 8 th edition By Atkins and De Paoula.		
Other required material (References):			
Course objectives:	<i>On successful completion of this course the student will be able to...</i> <ol style="list-style-type: none">1- Gain general basics, principles and applications of chemistry2- Ability to recognise and solve problems related to chemistry.3- Ability to make effective use of the library and other information resources in chemistry, including the primary literature, tabulated data.4- To develop the concepts that is needed for the discussion of equilibrium in chemistry in terms of thermodynamic sand particularly in terms of enthalpy and entropy.5- To understand the rate of reaction in terms of the motion of molecules in gas and liquid phases.6- To establish the precise meaning of reaction rate.7- To express the overall rate of reaction in terms of elementary steps and the atomic events that take place when molecules meet.8- Describe and explain the phenomena that take place at solid surfaces (physical and chemical processes)		

Topics covered and Calendar:	Topics		Weeks or number of hours
	Chemical equilibrium.		1- 2
	Molecules in motions		3- 6
	First Hr Exam		
	The rate of chemical reactions		7- 9
	The Kinetics of complex reactions		10- 11
	Second Hour Exam		
	Molecular reaction dynamics		12- 13
	Processes at solid surfaces		14- 15
	Final Exam		16
Grading Plan:	First Exam (25 Points) Second Exam (25 Points) Semester works (10 Points) Final Exam (40 Points) Will be announced by the registrar		
General Notes: Class Policies	1-University regulation Regarding absentees will be Applied 2-Names will be read at the beginning of the class and anyone coming after that will be marked absent 3- All mobiles must be switched off during class		
Prepared by: Dr. Lamees Z. Majjad			
Date: 15 February 2016			