



Palestine Technical University-Kadoorie Course Syllabus



Faculty:																							
Course Title:	Physical Chemistry(I)	Course Number:	15050241																				
Year:	2015/2016	Semester:	Second semester																				
Department:	Chemistry	Designation:																					
Prerequisite(s):	Chem. 15050102 , Differential equations																						
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:	9-10 sun, tues, thur	Class Room:	536																				
Course description:	This course is designed to give the student basic ideas related to chemical thermodynamics which include the states of gases and gas laws , molecular interactions , real gases and equations of states for real behavior, first law , state functions and exact functions, the second law and third law and their applications ,phase diagrams and phase transitions , thermodynamic description of mixtures , properties of solutions ,colligative properties, phase diagrams of binary systems and activities.																						
Textbook(s):	Physical Chemistry, 8 th edition By Atkins and De Paoula.																						
Other required material (References):																							
Course objectives:	<p><i>On successful completion of this course the student will be able to...</i></p> <ol style="list-style-type: none"> 1. Get familiar with the general concepts and applications of thermodynamics. 2. Undertake and solve some problems related to chemical thermodynamics. 3. Mastering library, online search and web literature. 																						
Topics covered and Calendar:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Topics</th> <th style="text-align: center;">Weeks or number of hours</th> </tr> </thead> <tbody> <tr> <td><u>Chapter 1:</u> The properties of gases.</td> <td style="text-align: center;">1- 2</td> </tr> <tr> <td><u>Chapter 2:</u> The First Law:</td> <td style="text-align: center;">3- 6</td> </tr> <tr> <td>First Hr Exam</td> <td></td> </tr> <tr> <td><u>Chapter 3:</u> The Second Law</td> <td style="text-align: center;">7- 9</td> </tr> <tr> <td><u>Chapter 4:</u> Physical transformation of pure substances.</td> <td style="text-align: center;">10- 11</td> </tr> <tr> <td>Second Hour Exam</td> <td></td> </tr> <tr> <td><u>Chapter 5:</u> Simple Mixtures</td> <td style="text-align: center;">12- 13</td> </tr> <tr> <td><u>Chapter 6:</u> Phase Diagram</td> <td style="text-align: center;">14- 15</td> </tr> <tr> <td>Final Exam</td> <td style="text-align: center;">16</td> </tr> </tbody> </table>			Topics	Weeks or number of hours	<u>Chapter 1:</u> The properties of gases.	1- 2	<u>Chapter 2:</u> The First Law:	3- 6	First Hr Exam		<u>Chapter 3:</u> The Second Law	7- 9	<u>Chapter 4:</u> Physical transformation of pure substances.	10- 11	Second Hour Exam		<u>Chapter 5:</u> Simple Mixtures	12- 13	<u>Chapter 6:</u> Phase Diagram	14- 15	Final Exam	16
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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