Course Specifications

General Information

Course name	Practical Physical Chemistry(1)
Course number	CHEM3119
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	0
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

1 - The objective of the physical chemistry laboratory (I) course is: to carry out experiments safely and carefully in the laboratory.
2 - to obtain data accurately and to manipulate the data correctly.
3 - to carry out experiments safely and carefully in the laboratory.
4 - to obtain data accurately and to manipulate the data correctly.

Intended Learning Outcomes

Knowledge and Understanding	* Ability to recognize and solve problems
Professional Skills	* Creative thinking
General Skill	* . Ability to interpret experimental results, perform calculations on these results, writing reports and draw reasonable conclusions

Course Contents

1 - Measuring the activity coeficients of weak electrolytes
2 - clock reaction
3 - determination of order
4 - determination of rate constants
5 - potentiometric reaction of weak acid
6 - Adsorption of charcoal on acetic acid
7 - Adsorption of charcoal on oxalic acid
8 - potentiometric titration
9 - catalytic reactions
10 - Laboratory manuals will be provided to students.
11 - The students should read and understand the laboratory protocol and read suggested reference materials prior to the lab session

Teaching and Learning Methods

1 - The students should read and understand the laboratory protocol and read suggested reference materials prior to the lab session
2 - some lab session time will usually be devoted to a discussion of the theory concern the experiment.
3 - Running the experiment. Each team is responsible for conducting each experiment
4 - End of the experiment. Preliminary discussion of the experimental outcomes with lecturer
5 - Report.

Students Assessment

Assessment Method	TIME	MARKS
Mid Exam		20%
Attendance and discussion		10%
Homework and project reports		20%
Notebook		10%
Final Exam		40%

Books and References

Course note	Lab manual prepared by Dr Nasser Abu Ghalwa 2003