Jordan University of Science and Technology
Department of Chemistry
Course Syllabus: Chem 107

Course Information	
Course Number: Chem107 (911072)	**Course Name:** General Chemistry Lab
Credit Hours: 1	**Contact Hours:** 2
E-learning web address: www.Just.edu.jo/e-learning	
Prerequisites: Chem 101 and 103 or parallel	
Required or Elective or Selected Elective	

Instructor Information	
Coordinator:	**Instructor:**
Office Hours:	**Office Location:**
Instructors E-mail:	

Course Catalog
Course Description: (Give a brief description of the course as it appears in the study plan) The experiment will explore particular chemical or physical systems and will draw conclusions by further experimentation. A student will be discovering concepts rather than verifying them.
Textbook: Textbook: (title, author, and year) **Textbook**: Collected Manual

Evaluation		
Mid Term Exam	40	%
Reports	20	%
Final Exam	40	%

Outcomes of instruction: By the end of the course, studentsshould be able to
1- To develop reasoning and problem – solving skills including the ability to identify Pertinent variables , recognize qualitative terndes in data , determine what , if any quantitative trends in data , determine what , if any , quantitative relationships exist , and test the validity of conclusions . 40% 2- To master the basic laboratory skills need to enter advanced chemistry courses 20% 3- T correlate the day – to – day observation with chemistry experiment 20% 4- Exhibit a basic knowledge of physical properties of chemical reactions . 20%

Topics to be Covered	
Week	**Topics**
1	Laboratory Safety
2	Density
3	Physical Separation of mixture
4	Limiting Reactant
5	Chemicals in everyday life
6	Collegative Properties
Mid Term Exam (40%)	
7	Calorimetry
8	Acid – base titration
9	Determination of a rate law
10	Quantitative yield of redox reaction
11	Quantitative analysis of Cations
Final Exam (40%)	

Relationship of the Course to the Chemistry Program Outcomes:

Program outcomes (a – k)	√	Level (L, M, H)
(a) an ability to apply knowledge of mathematics, science, and applied sciences	√	**H**
(b) an ability to design and conduct experiments, as well as to analyze and interpret data	√	**M**
(c) an ability to formulate or design a system, process, or program to meet desired needs	√	**M**
(d) an ability to function on multidisciplinary teams		
(e) an ability to identify and solve applied science problems	√	**L**
(f) an understanding of professional and ethical responsibility		
(g) an ability to communicate effectively		
(h) the broad education necessary to understand the impact of solutions in a global and societal context		
(i) a recognition of the need for and an ability to engage in life-long learning	√	**H**
(j) a knowledge of contemporary issues	√	**L**
(k) an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.	√	**M**