



مركز الاعتماد
وإضمان الجودة
ACCREDITATION & QUALITY ASSURANCE CENTER



The University of Jordan

Accreditation & Quality Assurance Center

Course Syllabus

Course Name:
General Chemistry Lab
(0333109)

1	Course title	General Chemistry lab
2	Course number	0333109
3	Credit hours (theory, practical)	0 theory, 1 practical
	Contact hours (theory, practical)	0 theory, 3 practical
4	Prerequisites/corequisites	General chemistry 1 (0303101)
5	Program title	BSc in chemistry
6	Program code	0303
7	Awarding institution	The University of Jordan
8	Faculty	Science
9	Department	Chemistry
10	Level of course	1st year
11	Year of study and semester (s)	2 nd Summer Semester (2016-2017)
12	Final Qualification	
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	

16. Course Coordinator:

Dr. Mansour Almatarneh
 Office # 26
 Chemistry building
 Phone: 06 5355 000 ext 22162
 Email: m.almatarneh@ju.edu.jo

17. Other instructors:

Prof. Ehab Al-Shamaileh
 Office #30
 Chemistry building
 Phone: 06 5355 000 ext -22141
 Email: ehab@ju.edu.jo

Ms. Alaa Abu Jabal

18. Course Description:

Selected experiments representing the following subjects in general chemistry: tools and measurements, empirical formula, limiting reagent, acid-base reactions, oxidation reduction reactions, thermodynamics, common ion effect.

19. Course aims and outcomes:

<p>A- Aims: The lab work in this class of aims to</p> <ol style="list-style-type: none"> 1- To reinforce the material the student have learned the general chemistry class (0303101) and to give the students the chance to apply what they have learned practically. 2- The lab will give the chance to the students to learn how to work in a lab wising common lab tools and glassware 3- The student will learn how to work in a lab in safe manner 4- The student will learn how to collect data and write a short lab report in a professional manner <p>B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...</p> <p>The intended outcome of this class can be categorized into to three major values:</p> <p>A. Knowledge:</p> <ol style="list-style-type: none"> 1. Recognize fundamentals of chemistry <p>B. Intellectual Skills:</p> <ol style="list-style-type: none"> 1. Analyze and interpret experimental data 2. Perform the experiment, and presenting the results <p>C. Practical Skills:</p> <ol style="list-style-type: none"> 1. Evaluate and manage the risks of chemical substances and laboratory procedures 2. Conduct standard laboratory procedures <p>D. Transferable Skills</p> <ol style="list-style-type: none"> 1. learn how to work individually and with partners effectively
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20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
<p>In this lab there are 10 experiments including an orientation in the lab and about safety rules.</p> <p>The experiments are</p> <ol style="list-style-type: none"> 1 Safety Rules & Laboratory Techniques 2. Techniques and Measurements 3. Formula of a Hydrate 4. The Empirical Formula of an Oxide 5. Limiting Reactant 6. Determination of Acetic Acid in Vinegar 7. The Neutralization Capacity of Antacid 8. Bleach Analysis (Part B only) 9. Molar Mass of a Volatile Liquid 10. Thermochemistry and Hess's Law <p>After finishing the first six experiments the students are given the midterm exam and the final exam is performed at the end of the semester. After doing each experiment students have to fill a lab report handed and graded in the same lab period</p>					

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

1. 15-20 minutes lecture at the beginning of each laboratory period talking about one topic in this experiment
2. Lab manual developed for this class, available to the students from the bookstore
3. Discussing topics with the students in and outside the lab

22. Evaluation Methods and Course Requirements:

The students are evaluated by:

- Written exams (Midterm exam, and final exam)
- Quizzes
- Lab reports
- Participation and how good the students adhere to the regulation of lab work

23. Course Policies:

A- Attendance policies:

All students are expected to follow the rules at The University of Jordan. Unexcused absences exceeding 15% of the total number of class meetings (8 classes) will result in " F " grade

B- Absences from exams and handing in assignments on time:

C- Health and safety procedures:

All students are expected to follow the safety rules of the lab work

D- Honesty policy regarding cheating, plagiarism, misbehavior:

- Cheating and plagiarism will result a grade of zero in that assignment. if this behavior is repeated, this case will be reported to the chairman of the department to apply the university regulation.
- Student who Misbehave in the lab will be asked to leave the lab, his grade in that work will be zero and the student will be considered absent.

E- Grading policy:

Lab reports are given 10% of the total work

Quizzes are given 20%

Midterm exam is given 20%

Evaluation is given 10%

Final exam is given 40%

24. Required equipment:

Variety of instrumentations and electronics need in this lab, including (but not exclusive)

- Lab glassware
- Balances

25. References:

A- Required book (s), assigned reading

General chemistry essential concepts, R. Change and J Overby, 7th edition, McGraw Hill

26. Additional information:

Name of Course Coordinator: Dr. Mansour Almatarneh Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File