



Course Specifications

Course Title:	General chemistry
Course Code:	101Chem-4
Program:	Bachelor in Architecture-Interior Design- Applied arts
Department:	Architecture-Interior Design- Applied arts
College:	Design and Architecture
Institution:	Jazan University

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A. Course Identification

1. Credit hours:	4 hours (3lecture+2 laboratory.)
2. Course type	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	Level 2/1 st Year.
4. Pre-requisites for this course (if any):-	None
5. Co-requisites for this course (if any):-	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	5	100%
2	Blended		
3	E-learning		
4	Correspondence		
5	Other		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	30
3	Tutorial	0
4	Others (specify) 2 Mid term exams (1 hour for each) 1 Lab exam (2 hours) 1 Final Exam (2 hours)	6
	Total	81
Other Learning Hours*		
1	Study (Lecture) 1/ 1 credit hour (practical) 0.5/ 1 credit hour	15x3= 45 15x 0.5 =7.5
2	Assignments 2 Mid term exams(1 hour for each) 1 Lab exam (2 hours) 1 Final Exam (2 hours)	6
3	Library 1/ 3credit hour	15
4	Projects/Research Essays/Theses	
5	Others(specify)	
	Total	154.5

*The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

This course outline good foundation in chemical knowledge that allows the students to recognize qualitative and quantitative inquiries into topics in natural science.

2. Course Main Objective

After this course the student is expected to be able to define the atomic, molecular, and ionic structure of matter and its relation to the physical and chemical properties of substances. In addition, to understand the measurement and stoichiometric calculations of quantities of substances and their quantitative behavior in chemical reactions, using mass, volume, and mole quantities of gases, liquids, and solids. Also the student will be able to understand the organization of the elements in the periodic table and the relationship of their physical and chemical properties as represented by the table;

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	Recognize basic chemical concepts and understand of how those concepts are relevant to other courses and their daily lives	K2
2	Skills :	
2.1	Demonstrate laboratory procedures, recording data and observations and interpretation of experimentally acquired data.	S2
3	Competence:	
3.1	Understand basic chemical principles and master problem-solving skills.	C1

C. Course Content

No	List of Topics	Contact Hours
1	Introduction, Gases	6
2	Properties of Liquids	3
3	Chemical equilibrium	6
4	Ionic equilibrium	6
5	Atomic Structure	6
6	Periodic Table	8
7	Chemical bonds	6
8	Introduction to organic chemistry	4
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Recognize basic chemical concepts and understand of how those concepts are relevant to other courses and their daily lives	- Lectures - Tutorial discussions	MCQ (Theoretical objective test) by test specification table.

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.0	Skills		
2.1	Demonstrate laboratory procedures, recording data and observations and interpretation of experimentally acquired data and its application	- Lectures - Laboratory practice	(Theoretical and Lab test) by Test specification table
3.0	Competence		
3.1	Understand basic chemical principles and master problem-solving skills	- Lectures	(Theoretical objective test) by Test specification table

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	1st midterm exam	6	10%
2	2nd midterm exam	12	10%
3	Participation	Periodically	10%
4	Laboratory exam	15	20%
5	Final exam	16	50%
6	Total		100%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

- Individual conclusions and academic advice is supposed to allocate a minimum of 6 hours per week.
- Tutorial for week students is supposed to allocate a minimum of 4 hours per week.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	1- الكيمياء العامة – حسن أحمد شحاتة، مكتبة الدار العربية للكتاب، الطبعة الأولى ٢٠٠٩ م 2 Peter Atkins and Julio de Paula, 2005 "The Elements of Physical Chemistry
Essential References Materials	(Journals, Reports, etc.)
Electronic Materials	Websites on the internet that are relevant to the topics of the course
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	1- Lecture room with 60 seats. 2- Chemistry lab with 30 seats
Technology Resources (AV, data show, Smart Board, software, etc.)	1- Data show attached to instructor computer and projector screen. 2- Scientific calculator
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods	
		indirect method	direct method
Effectiveness of teaching and assessment	Students	- On line system course survey	
	Peer Reviewer or Head of Department		Peer OR Head of Department observation
Quality of learning resources	Students	- On line system course survey	
	Peer Reviewer or Head of Department		Peer OR Head of Department Assessment
Achievement of course learning outcomes	Students	Course LO survey	
	Program Assessment Committee		Theoretical and practical tests According to Test specification table

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods(Direct, Indirect)

H. Specification Approval Data

Council / Committee	Zienab Abd El Whab Ahmed
Reference No.	IDS-2-7
Date	14/9/1440