

## General chemistry Course Description

<b>1. Course Name:</b>	
General chemistry	
<b>2. Course Code:</b>	
<b>3. Semester / Year:</b>	
First semester/ First year 2026-2025	
<b>4. Description Preparation Date:</b>	
1/9/2025	
<b>5. Available Attendance Forms:</b>	
Attendance	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
75 hours / 3 units	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name:Asst. Lect. Zahraa Emad Hussein	
Email: <a href="mailto:zahraa_e.hussein@alzahraa.edu.iq">zahraa_e.hussein@alzahraa.edu.iq</a>	
<b>8. Course Objectives</b>	
Course Objectives	<ul style="list-style-type: none"><li>• Knowing how to distinguish between active groups in terms of properties, preparation, and most important reactions</li><li>• Knowing and understanding the types of alcohol</li><li>• Knowing and understanding the most important reactions</li><li>• Knowing and understanding the most important methods of preparation</li><li>• Knowing and understanding how to compare aldehydes and ketones</li></ul>

## 9. Teaching and Learning Strategies

<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Daily quizzes</li> <li>• Activities in the classroom</li> </ul>
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## 10. Course Structure

Week	Hours	Required learning outcomes	Unit or subject name	Learning method	Evaluation method
1 <sup>st</sup>	5	Preparation, installation	Molecular structure of the atom	Theoretical, practical	Discussion, Exams
2 <sup>nd</sup>	5	Preparation, installation	Quantitative analysis methods	Theoretical, practical	Discussion, Exams
3 <sup>rd</sup>	5	Preparation, installation	Molar concentrations	Theoretical, practical	Discussion, Exams
4 <sup>th</sup>	5	Preparation, installation	Chemical bond	Theoretical, practical	Discussion, Exams
5 <sup>th</sup>	5	Preparation, installation	Hydrocarbon	Theoretical, practical	Discussion, Exams
6 <sup>th</sup>	5	Preparation, installation	Alkenes	Theoretical, practical	Discussion, Exams
7 <sup>th</sup>	5	Preparation, installation	Alkanes	Theoretical, practical	Discussion, Exams
8 <sup>th</sup>	5	Preparation, installation	Alkynes	Theoretical, practical	Discussion, Exams

9 <sup>th</sup>	5	Preparation, installation	Alcohols	Theoretical, practical	Discussion, Exams
10 <sup>th</sup>	5	Preparation, installation	Aldehydes and ketones	Theoretical, practical	Discussion, Exams
11 <sup>th</sup>	5	Preparation, installation	Carboxylic acids	Theoretical, practical	Discussion, Exams
12 <sup>th</sup>	5	Preparation, installation	Amines	Theoretical, practical	Discussion, Exams
13 <sup>th</sup>	5	Preparation, installation	Aromatic compounds	Theoretical, practical	Discussion, Exams
14 <sup>th</sup>	5	Preparation, installation	Sugars	Theoretical, practical	Discussion, Exams
15 <sup>th</sup>	5	Preparation, installation	Halogen compound	Theoretical, practical	Discussion, Exams

<b>11. Course Evaluation</b>	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc	
<b>12. Learning and Teaching Resources</b>	
Required textbooks (curricular books, if any)	Principles of General Chemistry, Morrison and Boyd Organic Chemistry, Harper's Biochemistry (Lectures)
Main references (sources)	<ol style="list-style-type: none"> <li>1. <i>Solutions for General Chemistry: Principles and Modern Applications</i> 11<sup>th</sup> Ralph H. Petrucci, F. Geoffrey Herring, Jeffry D. Madura, Carey Bissonnette</li> <li>2. <i>Solutions for CHEMISTRY: The Molecular Nature of Matter and Change</i> 7<sup>th</sup> Martin S. Silberberg, Patricia G. Amateis</li> </ol>

<b>Recommended books and references (scientific journals, reports...)</b>	<b>Scientific journals from the Internet, reports, and scientific research from the Internet</b>
<b>Electronic References, Websites</b>	<b>Scientific journals from the Internet, reports, and scientific research from the Internet</b>