

Ministry of Higher Education and Scientific Research



**Department of Chemistry**  
**College of Science**  
**University of Salahaddin**  
**Subject: General Chemistry**  
**Course Book – First Stage Students**

Lecturer's name:

Practical part: MSc Hero Rahman

Theoretical part: Dr Suzan Salahuddin Taha

Academic Year: 2023/2024

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Directorate of Quality Assurance and Accreditation

1. Course name	General Chemistry
2. practical Lecturer in charge	Hero Sabah Rahman

<b>3. Department/ College</b>	<b>Physical /Science</b>
<b>4. Contact</b>	Hero.rahman@su.edu.krd
<b>5. Time (in hours) per week</b>	<b>Theory: 1hr ,Practical: 2 hr</b>
<b>7. Course code</b>	
<b>8. Teacher's academic profile</b>	<b>Background</b> BSc in Chemistry from College of Science - Salahaddin University MSc in Natural product,calabaria university
<b>9. Keywords</b>	Organic compounds, analytical preparation, inorganic chemistry , physical properties, chemical reactions
<b>10. Course objective:</b> <ul style="list-style-type: none"> <li>• The main objective of this course is to build foundation knowledge of general chemistry required in later advanced levels.</li> <li>• To familiarise the students with different compounds and the physical and chemical properties of each.</li> <li>• Build necessary skills required for students to tackle research problems based on the knowledge acquired throughout the course.</li> </ul>	<b>11. Student's obligation</b> <ul style="list-style-type: none"> <li>■ The student must attend all lectures and practical lab sessions</li> <li>■ Should submit weekly reports on practical experiments</li> <li>■ Students must sit two exams throughout the academic year in addition to a final exam on the given topics</li> </ul>

<p><b>12. Assessment scheme</b></p> <p>Breakdown of overall assessment and examination A total of 100 marks are distributed as follows:</p> <ul style="list-style-type: none"> <li>■ A total of 50 marks is calculated based on students' efforts throughout the course including: exams, quizzes and class attendance and activity. This is distributed over both theoretical and practical parts</li> <li>■ A final examination in topics given throughout the course (accounts for 40 marks)</li> </ul>	<p><b>13. Student learning outcome:</b></p> <p>By the end of this course the students should be:</p> <ul style="list-style-type: none"> <li>■ Familiar with the basic principles of chemistry</li> <li>■ Able to identify some of the main compounds</li> <li>■ Understand the driving physical and chemical characteristics behind different properties exhibited by compounds</li> <li>■ Identify the areas where organic chemistry is applied and their significance in science</li> </ul>
<p><b>14. Student learning outcome:</b></p> <p>By the end of this course the students should be:</p> <ul style="list-style-type: none"> <li>• Familiar with the basic principles of chemistry</li> <li>• Able to identify some of the main compounds</li> <li>• Understand the driving physical and chemical characteristics behind different properties exhibited by compounds</li> <li>• Identify the areas where organic chemistry is applied and their significance in science</li> </ul>	<p><b>15. Course Reading List and References:</b></p> <ul style="list-style-type: none"> <li>• Efficiently Studying Organic Chemistry: for students of chemistry, biochemistry, biology, pharmacy, and medicine By Eberhard Breitmaier, Second revised edition, 2016</li> <li>• Modern Analytical Chemistry; by David Harvey.</li> <li>• Organic Chemistry, Robert Thornton Morrison, Robert Neilson Boyd, Sixth edition, Prentice Hall, 1998</li> </ul>
<p><b>16. Practical Topics</b></p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Experiment (1):</b> determination of density <b>Experiment (2):</b> preparation of solid and liquids</p> <p><b>Experiment (3):</b> Physical Properties of Organic Compounds: Determination of Melting Point (m.p.)</p> </div>	<p><b>17. Extra notes:</b></p> <p><b>18. Peer review</b></p>

<p><b>Experiment (4):</b> Physical Properties of Organic Compounds: Determination of Boiling Point (b.p.)</p>	
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<p><b>Experiment (5):</b> Simple Distillation</p>	
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<p><b>Experiment (6):</b> Separation of Compounds Based on size <b>Experiment (7):</b> titration and standaration of acid and base</p>	
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