

**Syllabus 1445 (2023-2024)**  
**GENERAL CHEMISTRY 1**  
**(CHEM 101)**

**Textbook:** *Raymond Chang, Chemistry, 14<sup>th</sup> edition, 2022*

Topics	Page Number	Lecture hours
<b><i>Matter and Measurements</i></b>		
1.1 Chemistry: A Science for the Twenty-First Century	2	<b>3</b>
1.2 The Scientific Method	4	
1.3 Measurements	6	
1.4 Handling Numbers	13	
1.5 Dimensional Analysis in Solving Problems	20	
1.7 Classification of matter	25	
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2.2 The Structure of the Atom	43	
2.3 Atomic Number, Mass Number, and Isotopes	49	
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2.5 Molecules and Ions	54	
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2.7 Naming Compounds	60	
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3.2 Avogadro's Number and Molar Mass of an Element	82	
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<b><i>Quantum Theory and the Electronic Structure of Atoms</i></b>		
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7.2 The Photoelectric Effect	281	
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<b>Physical Properties of Solutions</b>		
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<b>TOTAL HOURS</b>		<b>42</b>