

CHEM 201: Organic Chemistry
Course learning outcome
Chemistry Department, KFUPM

List of course learning outcomes	
1	<p>Knowledge:</p> <p>At the end of the course the students will,</p> <p>1.1 Know and recall the fundamental principles of organic chemistry that include chemical bonding, nomenclature, structural isomerism, stereochemistry, chemical reactions and mechanism.</p> <p>1.2 Name the functional groups and different class of organic compounds.</p> <p>1.3 Recognize the basic practical skills for the synthesis and analysis of organic compounds.</p>
2	<p>Cognitive Skills</p> <p>2.1 Predict the reactivity of an organic compound from its structure.</p> <p>2.2 Develop basic skills for the multi-step synthesis of organic compounds.</p> <p>2.3 Justify a reasonable mechanism for a chemical reaction.</p>
3	<p>Interpersonal Skills & Responsibility</p> <p>3.1 Demonstrate ability to work independently as well as within a team.</p> <p>3.2 manage resources and time and get along well with other members of the group.</p>
4	<p>Communication, Information Technology, Numerical</p> <p>4.1 Communicate the technical knowledge lucidly.</p> <p>4.2 Demonstrate the use of the computer for analysing and processing the experimental data.</p> <p>4.3 Illustrate chemical structures stereochemistry and chemical reactions.</p> <p>4.4 Write comprehensive reports on experiments such crystallization, distillation, synthesis, hydrogenation and filtration processes.</p>
5	<p>Psychomotor</p> <p>5.1 Assemble fractional and simple distillation apparatus, vacuum filtration and refluxing apparatus.</p> <p>5.2 Separate different liquids based on their boiling points and miscibility.</p> <p>5.3 Operate instrument such as melting point apparatus.</p>