



## Module Description

University of AL-Kafeel / College..... Academic Year (2020-2021)

<b>Stage:</b>	Second stage
<b>Specialization:</b>	Pharmacy
<b>Name of the Course in Arabic</b>	الكيمياء العضوية II
<b>Name of the Course in English</b>	Organic chemistry II
<b>Goals:</b>	To enable students to understand the chemistry of carbon, and the classification, properties and reactions of organic compounds. It includes understanding the basic structure and properties of organic compounds, in addition to the principles and application of stereochemistry on these compounds
<b>Description</b>	Study the concepts and fundamentals of organic chemistry, which is considered the basis for the study of pharmacology. Specifically, this course aims to study aldehydes, ketones, carboxylic acids and their derivatives, amines, phenols, and stereochemistry in terms of their definition, composition, properties, reactions and methods of preparation as well as their relationship to pharmaceutical compounds.
<b>Number of Theoretical lectures</b>	3
<b>Number of Practical lectures</b>	2
<b>Credits</b>	4
<b>Name of Instructor in Arabic</b>	حسنين علي عباس (نظري) , حسنين علي عباس (عملي)
<b>Name of Instructor in English</b>	Hasanain Ali Abbas
<b>Title</b>	مدرس
<b>Academic email:</b>	<a href="mailto:h_altameemi@alkafeel.edu.iq">h_altameemi@alkafeel.edu.iq</a>
<b>Phone number (WhatsApp)</b>	07700985987

**Curriculum / Theoretical:**

Week	Syllabus
1	Alkyl halides
2	Alkyl halides
3	Stereochemistry II
4	Stereochemistry II
5	Aldehydes and ketones (include also aldol and Claisen condensation); Classification, reactions and properties
6	Aldehydes and ketones (include also aldol and Claisen condensation); Classification, reactions and properties
7	Aldehydes and ketones (include also aldol and Claisen condensation); Classification, reactions and properties
8	Carboxylic acids: properties and reactions
9	Carboxylic acids: properties and reactions
10	Functional derivatives of carboxylic acids
11	Amines I and II
12	Amines I and II
13	Phenols

**Curriculum / Practical:**

Week	Syllabus
1	Determination of solubility class
2	Identification of alkyl and aryl halides
3	Identification of alcohols
4	Identification of aldehydes and ketones
5	Identification of carboxylic acids
6	Identification of carboxylic acids salts
7	Identification of amines
8	Identification of phenols

**References :****Main References :**

[1] **Organic Chemistry** by Robert T. Morrison and Robert N. Boyd.

[2] **Organic Chemistry** by Mc Murry; Thomason learning; CA, USA

**Secondary References:**

[1] **Organic Chemistry** by Jonathan Clayden, Nick Greeves, Stuart Warren & Peter Wothers

[2] **Organic Chemistry** by Graham Solomons & Craig Fryhle