Course Specifications

General Information

Course name	Inalustrial Chemistry (special topics)
Course number	CHEM4326
Faculty	
Department	
Course type	College Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - this course aims to:

2 - teach the priniciples of organometallic chemistry

3 - differentiate between organic, inorganic and organometallic chemistry

Intended Learning Outcomes

Knowledge and Understanding

* On completion of the course, students shall be able to
* use electron counting in assessing the reactivity and stability of organometallic compounds
* describe bond modes and determine reactivity for normally occurring ligands in organometallic complexes
* describe typical organometallic reactions,
* carry out information searches in organometallic databases and organometallic primart literature

Course Contents

1 - This course involves the principles of organometalic chemistry e.g. nomenclature, synthesis, structure, properties, and reactions. Study of the structure, dynamics and spectral properties of complexes ions and metal chelates.

2 - The course covers typical organometallic reactions, the use of organometallic reagents in catalysis and organic synthesis, chemical databases and the application of chemical analysis methods in organometallic chemistry. It also provides orientation about industrial applications for organometallic chemistry.

Teaching and Learning Methods

1 - Teaching using powerpoint

2 - Teaching on board

3 - students activities

4 - Asking and answering dusring the discussion

Students Assessment

Assessment Method	TIME	MARKS
mid term exam (1)	1h	20
mid term exam (2)	1h	20
quizes exam and homework activities	frequently	10
final exam	2h	50

Books and References

Essential books	Introduction to organometalecs, By Zuckerman