

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Catalysis Chemistry
Course number	CHEM4224
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Contents

- 1 - Course content The course focuses on the study of important principles and the basic concept of catalysis. Topics are:
 - The study of the basic concepts, the principles of catalysis, classification the different types of catalysts .
 - Definition of catalysis, elementary reactions, and catalytic sequences. • Homogeneous catalysis and reaction mechanism. • Heterogeneous catalysis • Concepts and principles of adsorption, desorption, surface area and porosity. • Modern theories for surfaces and surface reactions. • Langmuir-Hinshelwood kinetics. • Kinetic modelling, including model fitting and data treatment.