

Course Title	Enzymology	
Course Code	BC5109	
Course type	Obligatory	
Academic Year	2016/2017	
Coordinator	Prof. Tarek M. Mohamed	
Other Staff	Dr.Kareem samy	
Level	Level 1	
Semester	Semester 1	
Pre-Requisite		
Course Delivery	Lecture	14 x 2h lectures
	Practical	
	credit	2h
Parent Department	Chemistry Department	

Contents

	Enzymology(1) (Two hours/week)
Lecture 1	Definition of enzymes, importance, Classification of enzymes
Lecture 2	Coenzymes. Enzyme activity units and determination of enzymes
Lecture 3	Kinetics of enzymes: activation energy, effect of pH, thermal stability
Lecture 4	order of reactions, Km value, Vmax, Kcat
Lecture 5	Importance of KmTypes of inhibition
Lectures 6,7	Enzyme catalyze reaction with two or more substrates:
Lecture 8	Midterm
Lecture 9	Mechanism of enzyme specificity Theories of enzyme mechanism
Lecture 10	Transtient state theory of enzyme mechanismEnzyme mechanism of Chymotrypsin, proteases.
Lectures11,12	Allosteric enzymes
Lecture 13	Regulation of enzymes
Lecture14	Revision