

Jordan University of Science and Technology
Faculty of Agriculture
Department of Nutrition and Food Technology
First Semester 2006/2007

Course Information	
Course Title	Practical Agricultural Biochemistry (NF 353)
Course Number	NF 353
Prerequisites	***
Course Website	***
Instructor	Dr. Sana Janakat
Office Location	C2L3
Office Phone	22278
Office Hours	***
E-mail	jana@just.edu.jo
Teaching Assistant	Eng. Lubna Otaibei
Course Description	

Text Book	
Title	Basic Experimental Biochemistry: Laboratory Manual.
Author(s)	Abu-Gharibeh, K. and Janakat, S
Publisher	JUST. Irbid
Year	(1995)
Edition	2nd
Book Website	***
References	

Assessment Policy		
Assessment Type	Expected Due Date	Weight %
Mid Exam		20
Final Exam		40
Assignments (Reports)		10

	Course Objectives	Weights
1.	The student should be able to deal with some basic equipment in the lab	***
2.	The student should know how to handle different chemicals	***
3.	The student should prepare buffers and monitoring the pH	
4.	The student should be able to follow instruction from the manual to perform some basic techniques	
5.	The student should be able to isolate proteins	
6.	The student should be able to use enzyme kinetics to characterize enzymes	

7.	The student should be able to perform some tests to identify carbohydrates	
8.	be able to deal with some basic equipment in the lab	

Teaching & Learning Methods
Overhead projector Experiment Models using

Learning Outcomes: Upon successful completion of this course, students will be able to		
Related Objective(s)		Reference(s)
1		Chapter 2 and Handouts
1,2		

Course Content		
Week	Topics	Chapter in Text (handouts)
2	Introduction and safety regulations	3
3	Preparation of buffers and measurement of pH	4
4	Titration of amino acids	5
5	Chromatographic analysis of amino acids: TLC and PC	6
6	Spectrophotometry and protein content determination	7
8	Isolation and fractionation of proteins	8
9	Polyphenol oxidase characterization	9
10	Michaelis Menten constant determination	10
11	General tests for lipids	11
12	General tests for carbohydrates	12

Additional Notes	
Assignments	10
Exams	10
Cheating	
Attendance	
Workload	
Graded Exams	
Participation	
Laboratory	

