

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Nutrition and Dietetics
Course:	Biochemistry
Module:	Biochemistry and Molecular Biology
Department:	Molecular Biology and Biochemical Engineering
Academic Year:	2017-18
Term:	First
ECTS credits:	6
Year:	1st year
Type:	Basic
Language:	Spanish

Course Model:	B1	
a. Basic learning (EB):		60 %
b. Practical learning (EPD):		40 %



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2. LECTURERS

Coordinator	
Name:	Gladys Margot Cahuana Macedo
School:	School of Experimental Sciences
Department:	Molecular Biology and Biochemical Engineering
Area:	Biochemistry and Molecular Biology
Office Hours:	Mondays, Tuesdays and Thursdays: 15.00-17.00
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3. TOPICS

BASIC LEARNING (EB):

1. INTRODUCTION
2. BIOELEMENTS AND WATER
3. CARBOHYDRATES STRUCTURE
4. PROTEIN STRUCTURE
5. ENZYMES
6. FUNCTION AND INTERACTION OF PROTEINS
7. LIPIDS STRUCTURE
8. NUCLEIC ACIDS: STRUCTURE AND FUNCTION
9. BIOENERGY AND BIOLOGICAL OXIDATION

PRACTICAL LEARNING (EPD):

1. INTRODUCTION TO WORK IN THE BIOCHEMISTRY LABORATORY
2. SPECTROPHOTOMETRIC DETERMINATIONS
3. IDENTIFICATION OF PROTEINS
4. ENZYMES
5. IDENTIFICATION OF SUGARS
6. LIPIDS

PROBLEM DEVELOPMENT SESSION:

Enzymatic activity
Bioenergetics
Krebs cycle
Respiratory chain
Oxidative phosphorylation
Carbohydrate metabolism
Lipid metabolism
Protein metabolism
Nucleotide metabolism
Metabolism integration



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