

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Biotechnology
Course:	Organic Chemistry
Module:	Chemistry for the Molecular Biosciences
Department:	Physical, Chemical and Natural Systems
Academic Year:	2017-18
Term:	Second
ECTS credits:	6
Year:	1 st 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:	Ana Paula Zaderenko Partida	
School:	School of Experimental Sciences	
Department:	Physical, Chemical and Natural Systems	
Area:	Physical Chemistry	
Office Hours:	Mondays and Tuesdays: 11.00-14.00 h	
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3. TOPICS

- Unit 1. Introduction and basic concepts.
- Unit 2. Unsaturated organic compounds: alkenes and alkynes.
- Unit 3. Aromatic organic compounds.
- Unit 4. Heterocyclic organic compounds.
- Unit 5. Halogenated organic compounds.
- Unit 6. Alcohols, thiols and derivatives.
- Unit 7. Nitrogen compounds. Amines and amine-related compounds.
- Unit 8. Aldehydes and ketones.
- Unit 9. Carboxylic acids and derivatives.

Practices

- Practice 1. Chemical identification of the main functional groups.
- Practice 2. Chirality. Management of molecular models.
- Practice 3. Introduction to chromatography.
- Practice 4. Synthesis and purification of organic compounds I.
- Practice 5. Synthesis and purification of organic compounds II.
- Practice 6. Structure and reactivity of organic compounds. Resolution of problems.

The sessions will last 3 hours, and will be held in the laboratories of Physical Chemistry on the dates specified in the syllabus.