

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Environmental Sciences
Course:	Environmental Analytical Chemistry
Module:	Instrumental Techniques
Department:	Physical, Chemical and Natural Systems
Academic Year:	2017/18
Term:	Second
ECTS credits:	6
Year:	2nd year
Type:	Compulsory
Language:	Spanish

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



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2. LECTURERS

2. Coordinator:	
Name:	José María Pedrosa Poyato
School:	School of Experimental Sciences
Department:	Physical, Chemical and Natural Systems
Area:	Physical Chemistry
Office Hours:	Tuesdays, Wednesdays and Thursdays: 11.00-14.00
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3. TOPICS

Theory:

1. Fundamentals of Environmental Chemical Analysis.
2. Experimental data treatment.
3. Extraction and Preparation of Samples.
4. Basic Techniques of Chemical Analysis.
5. Introduction to Chromatographic Separations.
6. Introduction to Optical and Electrochemical Instrumental techniques.

Practice:

- Calibration methods: Determination of phosphates in water through spectrophotometry
- Volumetric 1: Determination of calcium and magnesium in water through complexometric technique.
- Volumetric 2: Determination of acids and bases by pH-metrics.
- Introduction to instrumental techniques.