UNIVERSIDAD DE LA RIOJA

BIOACTIVE ORGANIC COMPOUNDS
2016-2017

Bachelor Degree:	CHEMISTRY		702G
Course title:	BIOACTIVE ORGANIC COMPOUNDS		529
Year/Semester:	3rd/1st	ECTS Credits:	6

DEPARTMENT

Department of Chemistry					
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CONTENTS

The course is related to the emerging field of Biological Chemistry, especially to the organic synthesis of compound with biological interest as well as pharmaceutical compounds. Topics as natural products chemistry, medicinal chemistry and synthetic strategies are studied in this course.

UNIT1. Bioactive organic compounds and Biological Chemistry
UNIT2. Natural products
UNIT3. Pharmaceutical compounds and pharmaceutical industry
UNIT4. Retrosynthetic analysis. Revision of some examples
UNIT5. Disconnection of carbon-heteroatom bonds (C-X)
UNIT6. Protecting groups
UNIT7. Disconnection of carbon-carbon bonds (C-C)
UNIT8. Other type of disconnections.
UNIT9. Heterocyclic chemistry
UNIT10. Heterocycles in the synthesis of natural products
UNIT11. Heterocycles in the synthesis of pharmaceutical products

REFERENCES

Title
Organic synthesis: the disconnection approach
Workbook for organic synthesis
Heterocyclic chemistry
Heterocycles in natural product synthesis

EVALUATION SYSTEM

Power point and oral presentation of a synthetic project of a bioactive organic compound (30%, unrecoverable)
Final exam (70%, recoverable)