

UNDERGRADUATE DEGREE PROGRAMME
MEDICINAL CHEMISTRY
 3RD YEAR OF STUDY, 6TH SEMESTER

COURSE TITLE	BIOACTIVE ORGANIC PRODUCTS
COURSE CODE	31010030050SL1223216
COURSE TYPE	CC -compulsory course
COURSE LEVEL	1 st cycle (bachelor's degree)
YEAR OF STUDY, SEMESTER	3 rd year of study, 6 th semester
NUMBER OF ECTS CREDITS	5
NUMBER OF HOURS PER WEEK	4 (2 lecture hours + 2 seminar/laboratory hours)
NAME OF LECTURE HOLDER	Assoc. Prof. PhD Laura Gabriela SÂRBU
NAME OF SEMINAR HOLDER	Assoc. Prof. PhD Laura Gabriela SÂRBU
PREREQUISITES	Advanced level of English
A	GENERAL AND COURSE-SPECIFIC COMPETENCES
	<p>General competences:</p> <ul style="list-style-type: none"> → This course is intended for undergraduate students and its purpose is to improve knowledge of organic bioactive products → Operation with notions of structure and reactivity of chemical, biochemical and pharmaceutical compounds → Determination of the composition, structure and physical-chemical properties of chemical, biochemical and pharmaceutical compounds. <p>Course-specific competences:</p> <ul style="list-style-type: none"> → Carrying out multidisciplinary team activities using interpersonal communication skills to achieve the proposed objectives → Carrying out analyzes and ensuring quality control through methods and techniques specific to clinical and medical analyzes in compliance with the norms of good practice in analytical laboratories, procedures, instructions and quality specifications in force
B	LEARNING OUTCOMES
	<ul style="list-style-type: none"> → Upon successful completion of this discipline, students will be able to: → Operate with course-specific notions and to explain based on the structure of certain compounds certain physical and chemical properties → Know the methodology and practice of working with laboratory equipment specific to organic chemistry → Identify and use correctly laboratory methods and techniques, materials and substances in order to perform laboratory tasks
C	LECTURE CONTENT
	<ol style="list-style-type: none"> 1. Hydroxy-carboxylic compounds. Representative compounds 2. Phenolic aldehydes and phenolic ketones 3. Amino alcohols 4. Amino phenols 5. Terpene 6. Flavonoids
D	RECOMMENDED READING FOR LECTURES
	<ol style="list-style-type: none"> 1. Chimie Organică, C. D. Nenițescu, vol. I și vol. II, Editura Didactică și Pedagogică, București, 1980. 2. Chimie Organică, M. Avram, vol. I și vol. II, Editura Academiei, București, 1982. 3. Chimie Organică, V. Șunel, Editura Univ. "Al. I. Cuza" Iași, 1995. 4. Experimental Organic Chemistry, M. Harwood, C. J. Moody, and J. M. Percy, Blackwell Science, Oxford, 1999. 5. Organicum, Becker et al., Editura Științifică și Enciclopedică, București, 1982. 6. Practical Organic Chemistry, A. I. Vogel, Longmans, London, 1961. 7. The Science of Flavonoids, Erich Grotewold, Springer, 2006.
E	SEMINAR CONTENT
	<ol style="list-style-type: none"> 1. Synthesis of benzil 2. Synthesis of benzilic acid

	<ol style="list-style-type: none"> 3. Synthesis of phenacetine 4. Limonene extraction from orange peel 5. Synthesis of flavonoids
F	RECOMMENDED READING FOR SEMINARS
	<ol style="list-style-type: none"> 1. Chimie Organică, C. D. Nenițescu, vol. I și vol. II, Editura Didactică și Pedagogică, București, 1980. 2. Chimie Organică, M. Avram, vol. I și vol. II, Editura Academiei, București, 1982. 3. Chimie Organică, V. Șunel, Editura Univ. "Al. I. Cuza" Iași, 1995. 4. Experimental Organic Chemistry, M. Harwood, C. J. Moody, and J. M. Percy, Blackwell Science, Oxford, 1999. 5. Organicum, Becker et al., Editura Științifică și Enciclopedică, București, 1982. 6. Practical Organic Chemistry, A. I. Vogel, Longmans, London, 1961. 7. The Science of Flavonoids, Erich Grotewold, Springer, 2006
G	EDUCATION STYLE
LEARNING AND TEACHING METHODS	Presentation, discussion, experimental, demonstration
ASSESSMENT METHODS	Written
LANGUAGE OF INSTRUCTION	Romanian or english, on demand