


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓŁNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Basics of pharmacognosy		13.3.0854	
Name of unit administrating study			
Faculty of Chemistry			
Studies			
faculty	field of study	type	drugiego stopnia
Wydział Biologii	Biologia medyczna	form	stacjonarne
		specialty	wszystkie
		specialization	wszystkie
Wydział Biologii	Biologia	type	drugiego stopnia
		form	stacjonarne
		specialty	wszystkie
		specialization	wszystkie
Wydział Chemii	Chemia	type	pierwszego stopnia
		form	stacjonarne
		specialty	chemia biomedyczna, chemia kosmetyków
		specialization	wszystkie
Teaching staff			
dr n. med. Adam Kokotkiewicz; dr Magdalena Oset; prof. dr hab. Martin Kukwa; dr hab. Hanna Margońska; dr Magdalena Dudek			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		3	
Lecture		classes - 30 h	
The realization of activities		tutorial classes – 10 h	
classroom instruction		student's own work – 35 h	
Number of hours		Total: 75 h - 3 ECTS	
The academic cycle			
2022/2023 summer semester			
Type of course		Language of instruction	
- an elective course - obligatory		polish	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
multimedia-based lecture		Final evaluation	
		Graded credit	
		Assessment methods	
		- (mid-term / end-term) test	
		- Mid-course test	
		Final exam: written test with single choice questions or essay items	
The basic criteria for evaluation			
At least 51% correct answers in the test is required to pass the exam			
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
none			
B. Prerequisites			
organic chemistry- knowledge of chemical compounds like: hydrocarbons, carbohydrates, heterocyclic compounds, proteins, peptides, amino-acids, alcohols, aldehydes, ketones and their physico-chemical properties is required			

Aims of education

The aim of the course is to present the problems related to medicinal use of plants and provide students with techniques used in phytochemical analyses of major secondary metabolites in plant materials

Course contents

- history of phytochemistry
- Pharmacognosy as scientific discipline and practical knowledge (areas of interest, basic terms and definitions)
- biologically-active natural compounds: primary metabolites (carbohydrates, fats, proteins) and secondary metabolites (glycosides, terpenoids, phenylpropanoids, alkaloids) – chemical structures, physico-chemical properties, occurrence in plants (examples of plant materials)
- phytochemical analysis of the respective natural compounds groups (extraction methods, qualitative and quantitative analysis)
- biological activity of selected groups of natural compounds and examples of medicinal use

Bibliography of literature

A. Literature required to pass the course

Stanisław Kohlmünzer- Farmakognozja- PZWN, Warszawa, 2007

The learning outcomes (for the field of study and specialization)

Knowledge

learns the aspects of medicinal use of plant materials and techniques of phytochemical analysis of major secondary metabolites in plant materials

Skills

understands the role of plant materials in medicine
can conduct phytochemical analysis of plant materials

Social competence

understands the need of continuous education and personal development

Contact

adam.kokotkiewicz@biol.ug.edu.pl