## **COURSE DESCRIPTION CARD**

	Facu	ilty o	f Civil	Eng	ineeri	ng and	d En	vironmental Scie	ences		
Field of study								Degree level and programme type	MSc.		
Specialization / diploma path								Study profile	Academic profile		
Course name	Natural medicinal substances from forest materials						s	Course code	IS-FF-00044S		
		fro	om fo	rest	materi	als		Course type	Erasmus		
Forms and number of	L	С	LC	Р	sw	FW	S	Semester	Summer		
hours of tuition	15		15					No. of ECTS credits	3		
Entry requirements	Chemistry, Biology										
Course objectives	The course covers practical issues related to the use in medicine of natural substances derived from forest raw materials, including familiarization with the chemical composition, structure, pharmacological activity, adverse effects as well as methods of their qualitative and quantitative analysis.										
Course content	Lectures: Classification of substances of natural origin by groups of active compounds that determine their activity. Characteristics of chemical composition and structure as well as selected physicochemical properties, pharmacological activity, application, dosage and side effects of selected secondary metabolites derived from forest raw materials. Drugs (including dietary supplements and food for special medical purposes), the components of which are natural compounds derived from vegetable raw materials.  Laboratory exercises: Isolation methods and innovative analytical techniques in qualitative and quantitative determination of active compounds from forest raw materials. Natural harmful and toxic substances found in plants.										
Teaching methods	Information and problem lecture with multimedia presentation, laboratory classes - performing tasks and chemical analyzes individually and in a group.										
Assessment method	Lecture - written test; laboratory exercises - exercise reports and presentation.										
Symbol of learning outcome				Lea	rning	outco	mes		Reference to the learning outcomes for the field of study		
L01	obta		thera					es related to n forest raw	L2P_W04		
LO2	of si	de ad	ctive c	ompo		and is	able	vith the effects to identify icine.	L2P_U05		
LO3	from	ı vari	ous so	ource		orepar	e sci	entific data entific studies	L2P_U11, L2P_U01		

LO4	Student can interact in a group and define priorities and work plans.	_U13					
Symbol of learning outcome	Methods of assessing the learning outcomes	Type of tuition during which the outcome is assessed					
L01	Written test	L					
LO2	Evaluation of reports and presentations.	LC					
LO3	Evaluation of reports and presentations.	LC					
LO4	Evaluation of reports and presentations.	LC					
S	Student workload (in hours)	No. of hours					
	participation in lectures	15					
	participation in the laboratory	15					
	consultations	5					
Calculation	preparation for the laboratory and reports	20					
	preparation of presentations	5					
	preparation for the written test	15					
	Total:	75					
	No. of ECTS Hours ECTS credits						
Student workload – a	ctivities that require direct teacher participation	35 1,4					
Stude	nt workload – practical activities	40 1,6					
Basic references	Traditional Herbal Remedies for Primary Health Care. World Health Organization, 2010, ISBN 978-92-9022-382-5 Koh Ling. A guide to medicinal plants. World Scientific Publishing, 2009, ISBN-13978-981-283-709-7 Medicinal mushrooms: recent progress in research and development. Singapore: Springer Nature, 2019. ISBN: 978-981-13-6381-8 Medicinal mushrooms [Elektronski vir] / Jure Pohleven, Tamara Korošec, Andrej Gregori; [photography by Andrej Gregori [et al.]; translated by Jure Pohleven] El. knjiga Podkoren: MycoMedica, 2016, ISBN 978-961-93889-1-4 (pdf) Smith, J., Rowan, N. and Sullivan, R. 2002. Medicinal Mushrooms: Their therapeutic properties and current medical usage with special emphasis on cancer treatments. University of Strathelyde, Glasgow,						
Supplementary	Scientific articles on the therapeutic importance of mus	shrooms and the	practical use				
references	of medical mushrooms (selection).						
Organisational unit	Faculty of Civil Engineering and Environmental  Date of issuing the second control of th						
conducting the course	Sciences	progra	ımme				
Author of the programme	Ewa Zapora, PhD	07.04.2020					
Lantura C alangan I C	Laboratory classes P - project SW - specialization	n warkahan E	M field work				

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar