

NAME OF THE COURSE		Spices and Aromatic Herbs				
Code	PMBN29	Year of study	3			
Course teacher	Professor Nada Bezić; PhD	Credits (ECTS)	2			
Associate teachers	Professor Valerija Dunkić, PhD	Type of instruction (number of hours)	L	S	E	F
			15		15	
Status of the course	Elective	Percentage of application of e-learning	10%			
COURSE DESCRIPTION						
Course objectives	The goal of this course is to introduce wild plants that have a meaning in the human diet, as well as spices and those used in pharmacy.					
Course enrolment requirements and entry competences required for the course						
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Student will be able to:</p> <ol style="list-style-type: none"> 1. Identify the most common wild edible plants 2. To distinguish which species are good for human food 3. To know what types are used as spices and additives 4. Know the role of pharmaceutical herbal preparations in the treatment of some diseases 5. Be familiar with isolation important plant secondary metabolites 					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures:</p> <ol style="list-style-type: none"> 1. Meaning of plants in the diet and treatment. View of lower plants and gymnosperms 2. Monocotyledons and woody angiosperms 3. Herbaceous dicotyledon - Crucifereae, Crasulaceae and Saxifragaceae 4. Herbaceous dicotyledon - Rosaceae, Leguminoseae, Oxalidaceae and Rutaceae 5. Herbaceous and woody dicotyledonous plants - Euphorbidaceae, Aceraceae, Malvaceae, Mirtaceae and Umbelifereae 6. Natural chemical ingredients of herbs 7. Glycosides, alkaloids, tannins, vitamins, minerals <p>Exercises:</p> <ol style="list-style-type: none"> 1. Review of aromatic plants, collection, identification and drying plant material 2. Methods of isolation of secondary plant metabolites 3. GC / MS and GC / FID method 4. Analysis and identification of chemical components isolated from secondary plant metabolites 5. Application of isolated secondary plant metabolites 					
Format of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input type="checkbox"/> partial e-learning		<input type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)			

	<input type="checkbox"/> field work					
Student responsibilities	Regular monitoring of lectures and active participation in the drafting exercise. The seminar work and the verbal exam.					
Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Class attendance	0.5	Research		Practical training	
	Experimental work	1.0	Report		(Other)	
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam		Project		(Other)	
Grading and evaluating student work in class and at the final exam	Oral exam 60% Held seminar presentation 20% Attendance 20%					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	B. Pevalek-Kozlina. Fiziologija bilja, Profil, Zagreb, 2003.			2		
	D. Kuštrak. Farmakognozija Fitofarmacija, Golden marketing – Tehnička knjiga, Zagreb, 2005.			1		
	D. Denffer & H. Ziegler: Botanika (Morfologija i fiziologija), Školska knjiga, Zagreb, 1982.			2		
	Adams, R.P. <i>Identification of essential oil components by gas chromatography/ mass spectroscopy</i> . Fourth ed. Allured Publishing Corp.: Carol Stream IL, USA					
Optional literature (at the time of submission of study programme proposal)	A. Fahn and D.F. Cutler: Xerophytes, Gebrüder Borntraeger, Berlin-Stuttgart, 1992. K.D. Dubravec i I. Regula. Fiziologija bilja, Školska knjiga, Zagreb, 1995. A. Fahn: Plant Anatomy, Pergamon Press, Oxford-NewYork-Toronto, Sydney, Pariz, Frankfurt, 1990					
Quality assurance methods that ensure the acquisition of exit competences	The quality of teaching will be monitored by collecting feedback from students through consultations, discussions and questions asked during class. At the end of the semester, evaluation of courses and teachers will be conducted by anonymous student surveys. Will be analyzed student achievement on the exam, and used for the purpose of improving quality in the coming academic year.					
Other (as the proposer wishes to add)						