

NAME OF THE COURSE		ALGAE AND FUNGI				
Code	PMB028	Year of study	2			
Course teacher	Associate Professor Ana Maravić, PhD	Credits (ECTS)	5			
Associate teachers	Tomislav Rončević, PhD	Type of instruction (number of hours)	L	S	E	F
			30		30	
Status of the course	Mandatory	Percentage of application of e-learning	20%			
COURSE DESCRIPTION						
Course objectives	To gain knowledge of the biodiversity of algae in terms of their biology and ecology, the phylogeny of algae that live in inland waters and sea, their ecological importance in the food chain, biodiversity and economic aspects. Based on taxonomic and phylogenetic connections master the skills of determination and microscopic analysis of cellular material algae. To gain knowledge about the biology of organisms that modern phylogenetic systematics puts into the realm of fungi. Meet representatives of the group and the organization of systematic categories of the fungi.					
Course enrolment requirements and entry competences required for the course	No requirements needed.					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	<p>Students will be able to:</p> <ol style="list-style-type: none"> 1. Define the general characteristics of algae and fungi. 2. Know representatives of the main groups based on cytology, ultrastructure of cells and structures of the talus. 3. Define taxonomic and phylogenetic relations. 4. Know the biology and ecology of representatives of the main group of algae, and fungi. 5. Apply the skills of microscopic analysis and determination of freshwater and marine algae. 6. Make a permanent preparations of algae. 7. Name microscopic fungi of medical importance. 8. Apply specific methods for the isolation and cultivation of clinically significant microscopic fungi. 9. Evaluate the morphological features of individual taxonomic groups important for species identification. 					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures:</p> <ol style="list-style-type: none"> 1. Introduction, classification and nomenclature of algae (2 hours) 2. Cytology and ultrastructure of cells and structures of the talus (2 hours) 3. Distribution and reproduction, biochemical and physiological characteristics of algae (2 hours) 4. Ecology and evolution and classification of algae (2 hours) 5. Laboratory rearing, economic aspect and their importance in nature (2 hours) 6. Algae as indicators of contamination of aquatic ecosystems (2 hours) 7. Knowing the basic characteristics of prokaryotic algae: Cyanobacteria. Phytoplankton size and importance (2 hours) 8. Eukaryotic representatives algae Rhodophyta (red algae) (2 hours) 9. Euglenophytes and Chrysophyta (2 hours) 10. Chlorophyta and Charophyta (2 hours) 11. Phaeophyta (2 hours) 12. Macroalgae and fouling (2 hours) 					

	13. Algae as ecological indicators of polluted water (2 hours) 14. Ecology, phylogeny and taxonomy of fungi (4 hours)					
Format of instruction	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input checked="" type="checkbox"/> partial e-learning <input type="checkbox"/> field work			<input type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)		
Student responsibilities						
Screening student work (<i>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</i>)	Class attendance	0.5	Research	0.5	Practical training	
	Experimental work	1.0	Report		(Other)	
	Essay		Seminar essay		(Other)	
	Tests	2.0	Oral exam		(Other)	
	Written exam	1.0	Project		(Other)	
Grading and evaluating student work in class and at the final exam	The final grade students will be based on the results achieved, including lectures, seminars and laboratory exercises. Evaluating student work will be based on a percentage of the resulting total number of points according to this scale : < 60 % insufficient ; 60-69 % sufficient (2), 70-79% solid (3), 80-89% very good (4), 90-100 % excellent (5).					
Required literature (available in the library and via other media)	Title				Number of copies in the library	Availability via other media
	Graham L.E. and Wilcox L.W. Algae. Prentice Hall. Upper Saddle River, N.J., 2000.				2	https://link.springer.com/chapter/10.1007/978-1-4020-8480-5_1
	Hoek C., Van Den D.G. and Johns H.M., Introduction to Phycology, Cambridge University press, U.K., 1994. Lee, R.E., Phycology. Cambridge University Press, 1999				1	
	Margulius L., Corliss J.O., Melkonian M., D.V. Chapman: Handbook of Protoctista, Jones and Bartlett, Boston, U.S.A., 1989.				1	
Optional literature (at the time of submission of study programme proposal)						
Quality assurance methods that ensure the acquisition of exit competences	Taking attendance in class; The annual analysis of the performance of the examination; Student survey in order to evaluate teachers ; Self-evaluation of teachers. Feedback from students who have already graduated from the relevance of the course content.					
Other (as the proposer wishes to add)						