

NAME OF THE COURSE		Environmental Education				
Code	PDB267	Year of study	1			
Course teacher	Associate Professor Mirko Ruščić, PhD	Credits (ECTS)	2			
Associate teachers		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	Explain basic ecological principles, analyze the impact of ecological factors on living beings, argue about biodiversity in the Republic of Croatia and the causes of biodiversity. Compare Primary and Secondary Organic Production. Analyze the impact and behavior of man in the protection of nature and the environment. Analyze sustainable development and environmental education					
Course enrolment requirements and entry competences required for the course	Completed subjects with basic biological contents. Input Competencies: basic biological knowledge.					
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"> <li>1. describe ecology as a science and explain the position and significance of ecology in modern society,</li> <li>2. to analyze the impact of ecological factors on the adaptation of plants and animals to a given habitat,</li> <li>3. to analyze different biocenoses and to understand the relationships and relationships of the members in bicensosis,</li> <li>4. to argue the influence and behavior of man on different ecosystems,</li> <li>5. analyze ecological data,</li> <li>6. Analyze Sustainable Development, Environmental Education,</li> <li>7. 6. plan experiments and field lessons.</li> </ol>					
Course content broken down in detail by weekly class schedule (syllabus)	<p>Lectures: / Exercises:</p> <ol style="list-style-type: none"> <li>1. The position of ecology as science, the division of ecology, the importance of ecology in modern society, the basic concepts in ecology.</li> <li>2. Living world (plants, vegetation, animals) under the influence of various abiotic and biotic factors.</li> <li>3. Circulation of substance energy flow. Environmental adaptations and plant life strategies, (life forms, meaning of life forms of plants, life strategies, life strategies systems ...)</li> <li>4. Factors for special adaptations (fire, drought, water stagnation, shade ...)</li> <li>5. Population ecology, definition and structure of plant population structure, elements of plant populations, herbaceous influence, spatial distribution of seeds, age structure of plant populations, dynamics of plant populations and ecological factors that shape, relative effect of ecological factors on plant population structure.</li> <li>6. Ecology of Population and Plant Communities. Biodiversity. Concept of ecological systems. Feeding chains.</li> <li>7. Influence of man on ecosystems. Global changes.</li> </ol>					

	<p>8. Ecological awareness of each individual about the need for protection and respect of nature and biodiversity, the development of sensitivity and positive attitudes towards our environment.</p> <p>9. Sustainable Development, Environmental Education.</p> <p>10th Ekosekcije.</p> <p>Develop ecological awareness, ecological literacy.</p>					
Format of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> on line in entirety <input type="checkbox"/> partial e-learning <input checked="" type="checkbox"/> field work			<input checked="" type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input checked="" type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)		
Student responsibilities	Attendance at least 70%.					
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	0,5
	Experimental work		Report		(Other)	
	Essay		Seminar essay	0,5	(Other)	
	Tests		Oral exam	0,5	(Other)	
	Written exam		Project		(Other)	
Grading and evaluating student work in class and at the final exam	Lesson 40%- Oral exam: 40%- Experiment and field work 20%					
Required literature (available in the library and via other media)	<b>Title</b>			<b>Number of copies in the library</b>	<b>Availability via other media</b>	
	Johanson, E.A., Mapping, M.J (2005). Changing Perspectives of Ecology and Education in Environmental Education. U:E.A. Johanson, M.J. Mapping (ur.), Environmental Education and Advocay, Changing perspectives of Ecology and Education. Cambridge: Cambridge University Press, str. 1-29.					
	Vujičić, L. (2008) Lifelong Learning for Sustainable Development					
	Jukić, R. (2013) Contents of Ecological Education in Gymnasium Programs. Soc.ekol. Zagreb, vol.22 (183) 3.					
	Steubing L. & H. O. Schwantes, 1992: Ökologische Botanik. 3. Aufl. Verlag Quelle & Meyer, Wiesbaden. Steubing L. & A. Fangmeier, 1992: Pflanzenökologisches Praktikum. Verlag Eugen Ulmer. Stuttgart.					
	Gračanin M. & LJ. Ilijanić, 1977: Introduction to Plant Ecology. Školska knjiga, Zagreb					

	Radović, J et al. (1999) State of Biological and Landscape Diversity of Croatia with Strategy and Action Plan of Protection, State Administration for Nature Protection and Environment.		
	Glavač, V (1999) Introduction to Global Ecology. State Administration for Nature and Environmental Protection, Zagreb		
Optional literature (at the time of submission of study programme proposal)	<p>Schultze E.-D., E. Beck, K. Müller-Hohenstein, 2002: Pflanzenzoologie. Spektrum Akademischer Verlag, Heidelberg-Berlin.</p> <p>Meštrović, M (2004) Ecology, textbook for 4th grade gymnasium. Schoolbook. Zagreb.</p> <p>Matas, M et al. (1992) Environmental Protection for Today and Tomorrow, School Book, Zagreb. Marković, D et al. (2004) Red List of Endangered Plants and Animals of Croatia, State Institute for Nature Protection and the Environment, Zagreb.</p> <p>Townsend, C.R., Begon, M., Harper, J.L (2006) Essentials of Ecology, Blackwell Publishing, Oxford</p>		
Quality assurance methods that ensure the acquisition of exit competences	Active participation in teaching, evaluation of subjects and teachers, consultations		
Other (as the proposer wishes to add)			