

Study Programme : MSc. in Ecology			
Degree level: Master degree			
Course Title: Macrophytes as Bioindicators			
Professor: Dragana Vukov			
Elective Course			
Number of ECTS: 6			
Prerequisites: Plant Systematics, Plant Ecology, Plant Physiology			
Course Objective: Introducing to indicational potential of plant species, in order of their to use them in estimation of ecological conditions in aquatic habitats.			
Course Outcome: Individual planning and realisation of research, processing of gained results, and their presentation.			
Course Content: <i>Theoretical part</i> Interaction of plant organism and environment. Adaptations on habitat conditions. Adaptive strategies. Ecological factors. Life forms as indicators of habitat conditions. Ecocline. Indicator values of plants. Application of indicator values. Macrophytes as biological parameters in assessment of water quality. <i>Practical part</i> Estimation of plant species abundance. Numerical derivatives of estimated abundance. Determination of plant species indicator values. Quantification of indicator values and spatial distribution.			
Reading List: 1. Kojić, M., Popović, R., Karadžić, B. (1994): Fitoindikator i njihov značaj u proceni ekoloških uslova staništa. IP „Nauka“, Institut za istraživanja u poljoprivredi „Srbija“, Beograd. 2. Stevanović, V.(1992): Klasifikacija životnih formi flore Srbije. U: Sarić, M. (izd.): Flora Srbije 1, SANU, Beograd. 3. Stevanović, B., Janković, M. (2001): Ekologija biljaka sa osnovama fiziološke ekologije biljaka. NIK International, Beograd. 4. Borhidi, A. (1993): Social Behaviour Types of the Hungarian Flora, its Naturalness and Relative Ecological Indicator Values. – A Környezetvédelmi és Területfejlesztési Minisztérium Természetvédelmi Hivatala és a Janus Pannonius Tudományegyetem Kiadványa, Pécs. 5. Landolt, E. (1977): Ökologische Zeigerwerte zur Schweizer Flora. Geobotanischen Institute, Eidg. Techn. Hochschule, Stiftung Rübel, Zürich.			
Total hours:			
Lectures: 2	Practicals: 2	Other:	Student research work: 5
Methods of instruction: Lectures in form of consultations, practicals and student research work.			
Assessment (maximum number of points 100)			
Requirements	points	Final exam	points
Active participation in lectures	10	Practical exam	40
Active participation in practicals	10		
Research work	40		
Remark: Student research work is required.			