Study Programme: MSc in Biology

Degree level: Master degree

Course Title: Floristic Diversity, Vulnerability and Protection

Professor: Pal Boza

Required/Elective Course: Elective course

Number of ECTS: 6

Prerequisites: Passed exams "Systematics of Vascular Plants with Basics Phylogeny", "Biogeography" and "Plant Ecology"

Course Objective: Introducing diversity of world's flora, flora of Europe and the position of Serbia in the floristic diversity of Europe. Factors affecting the diversity of flora. Centers of floristic diversity. Regional floristic diversity in Serbia. The importance of proper and timely assessment of plant populations, toward conservation of global diversity.

Course Outcome: Introduction endemic, relict, rare and plants on the borders of distribution in Serbia. Attending the course, students are trained to identify habitats and species that require protection. Gaining knowledge about the system and the effectiveness of the protection of flora in Serbia, as well as the experiences of other countries.

Course Content:

Theoretical part

Definition of plant life and its role in the biosphere. Global diversity of flora, diversity of European flora. Rare, relict, endemic and subenedemic taxa, on the areal borders in the Serbia. Vicar chains in Serbia. Number of divisions, classes, families, generas, species and subspecies in the flora of Serbia. Factors affecting the diversity of flora. Center of floristic diversity in Serbia. Categories of plant vulnerability with detailed emphasis on the criteria by which category are determined. The total size of the population, the total number of individuals, the percentage of the missing populations. The causes and factors of vulnerability, the possibility of removing those causes. Necessary protective measures. Phytogeographyc horions in Serbia, their size in region, and their importance in maintaining the overall diversity of flora. The legal level of protection, regulation, red list, red book. IPA areas in the territory of Vojvodina.

Practical part

The parameters used to quantitatively present diversity. Alpha diversity, real and relative diversity, gamma diversity. Centers of floristic diversity in Serbia. The four one-day field works. On the fieldwork will be visited two protected areas, where will be analysed: current status of the area, natural rarity of flora, as well as ways to eliminate factors of threat and ways of maintaining the area.

Reading List:

- 1. Stevanović, V Vasić, V. ed. (1995): Biodiverzitet Jugoslavije. Biološki fakultet Univerziteta u Beogradu, Beograd.
- 2. Stevanović, V. ed. (1999): Crvena knjiga flore Srbije. Ministarstvo za životnu sredinu Republike Srbije, Biološki fakultet Univerziteta u Beogradu, Zavod za zaštitu prirode Republike Srbije, Beograd.
- 3. Magurran, A. (2004): Measuring Biological Diversity. Blackwell Science Ltd and Blackwall Publishing Company, Oxford.
- 4. Службени Гласник РС (2008): Уредба о изменама и допунама Уредбе о стављању под контролу коришћења и промета дивље флоре и фауне. Службени Гласник Републике Србије, 38/2008.
- 5. Службени Гласник РС (2010): Правилник о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива. Службени Гласник Републике Србије, 5/2010.
- 6. Службени Гласник РС (2010): Уредба о изменама и допунама Уредбе о стављању под контролу коришћења и промета дивље флоре и фауне. Службени Гласник Републике Србије, 9/2010.

Total hours:		9		
Lectures: 2	Practicals: 2	Other:	Student research work: 5	
Methods of instruction:				

Remark: