

Study Programme : MSc in Biology			
Degree level: Master degree			
Course Title: Special Systematics of Vascular Plants			
Professor: Pal Boza			
Required/Elective Course: Elective course			
Number of ECTS: 6			
Prerequisites: passed exams Systematics of Vascular Plants with Basics of Phylogeny			
Course Objective: Acquiring knowledge of kinship relations within taxonomic categories and the importance of transitional taxonomic categories. The course is the basis for continuing professional development of students in the direction taxonomy of higher plants.			
Course Outcome: Increasing knowledge of the systematics of higher plants. Training for research work in plant taxonomy.			
Course Content:			
<i>Theoretical part</i>			
In the theoretical classes will be treated groups of higher plants, where there are transitional systematic categories, primarily in subfamilies and subgeneric level: subfamilies, tribes, subtribes, subgeneras, sectiones and subsectiones. Analysis of those characters, upon which were introduced transitional category, separately in the generative and vegetative region. The importance of small changes in taxonomic levels. Evolutionary heterobatmy of characters, within the families and generas in relation to the morphology of flowers and fruits, as well as the mechanism of scattering of seeds and fruits, and also in relation to the method of pollination. These characteristics are associated with the environment. Alternation and the superposition of certain regions and certain elements of flowers.			
<i>Practical part</i>			
The exercises are based on fresh plant material. Comparative analysis of representatives of different subfamilies. Indication of oligomerisation and polimerisation of elements in different regions of the flower. Construction of floral diagram, and performance of floral formulas specific to the type, section or subsection, podfamily, tribe and subtribe.			
Reading List:			
1. Graf, J., Weber, A., Weber, H., Kristen, I. (1975): Tefelwerk zur Pflanzensystematik. J. F. Lehmanns Verlag, Jena.			
2. Grant, W.F., ed. (1984): Plant Biosystematics. Academic Press, Toronto.			
3. Grupa autora: Urania növényvilág, Magasabb rendű növények I és II. Gondolat kiadó, Budapest.			
4. Judd, W.S., Campbell, C.S., Kellogg, E.A., Stevens, P.F., Donoghue, M.J. (2002): Plant Systematics: A Phylogenetic Approach. Sinauer Associates, USA.			
5. Soltis, d.E., Soltis, P.S., Endress, P.K., Chase, M.W. (2005): Phylogeny and evolution of angiosperms. Sinauer Associates, inc. Publishers, Sunderland, Massachusetts.			
6. Soó, R. (1965): Fejlődéstörténeti növényrendszertan. Tankönyvkiadó, Budapest.			
7. Takhtajan, A. (1991): Evolutionary Trends in Flowering Plants. Columbia University Press, New York.			
8. Takhtajan, A. (1997): Diversity and Classification of Flowering Plants. Columbia University Press, New York.			
9. Thompson, J.D. (2005): Plant Evolution in the Mediterranean. Oxford University Press, Oxford.			
Total hours:			9
Lectures: 2	Practicals:	Other: 2	Student research work: 5
Methods of instruction:			
Lectures, laboratory exercises, seminar paper.			
Assessment (maximum number of points 100)			
Requirements	points	Final exam	points
Active participation in lectures		Practical exam	
Active participation in practicals		Oral exam	50
Test(s) or	20		
Pre-exam testing	30		
Seminar paper			
Remark:			