

Title	Functional and structural genomics		
Code	3GN18NAK31M		
Prerequisites			
Description	<p>The object is to present the organization of eukaryotic genomes, their major components, and the regulation of genomics. The genomic organization is shown by a comparative analysis of the available genomic sequence of horticultural plant species, with special emphasis on major genom-arrangement events leading to the development of culture plants, the evolution of orthologous and paralogous genes. The course examines genomics testing tools, especially the role of bioinformatics. The functional genomics field exploring the function of the genomes is described by the review of the transcriptomics, proteomics and metabolomics. We also discuss the possibilities of investigating epigenomics and metagenomics</p>		
Lecturer	Dr. Attila Hegedűs, Dr. Júlia Halász, Dr. Zsuzsanna György		
Semester	4th, spring	Contact hours/week	1+3
Level	MSc	ECTS	4
Teaching and Learning Methods:			
Reading:			
Assessment:	exam		