Title	Molecular marker techniques		
Code	3GN18NAK11M		
Prerequisites	Classical genetics, Molecular genetics		
Description	The aim of the course is to familiarize students with the modern techniques of molecular markers, and to provide an opportunity for the thorough understanding of the advantages and disadvantages of each technique. The course goes into detailes of ttraditional techniques such as RAPD, AFLP, SSR, ISSR, ILP, SSCP, IRAP, REMAP, RBIP. During the course, marker development techniques will be also introduced. Students will get acquainted with the next generation sequencing techniques and the latest marker techniques based on these. The course provides insights into the methods of genetic mapping. Students can get acquainted with the benefits and latest achievements of marker assisted breeding and the use of molecular markers in genetic studies.		
Lecturer	Zsuzsanna Benyóné György PhD, Júlia Halász PhD		
Semester	2nd, spring	***Contact hours/week***	1+2
Level	MSc	**ECTS**	4
Teaching and Learning Methods:			
Reading:	**Compulsory literature:** -Henry, R.J. (szerk.) (2012): Molecular Markers in Plants, Wiley-Blackwell, Germany. ISBN:9780470959510 -Andersen, S.B. (2013): Plant Breeding from Laboratories to Fields. Intech. ISBN 9789535110903		
Assessment:	exam		