

<b>Title</b>	Plant physiology and molecular plant biology		
<b>Code</b>	3MN24NAK06M		
<b>Prerequisites</b>	Plant Biochemistry and Plant Physiology		
<b>Description</b>	The interactions of plant and its abiotic environment are highlighted by treating the following subject areas: General overview of interactions between plants and their abiotic environment. Water and mineral nutrient transport in the changing environment. Sensing of internal and external signals, transduction pathways and networks, role of plant hormones. Non-photosynthetic effects of light, consequences of extreme temperature and salt exposure. Levels and types of adjustments to external conditions, tolerance strategies. Molecular background and regulation of circadian and photoperiodic rhythms. Description of processes leading to flowering, seed and fruit development in the molecular level in the light of external and internal regulators.		
<b>Lecturer</b>	Dr István Papp, professor, Kissné Dr. Erzsébet Bába PhD, assistant professor, Dr. Anita Szegő PhD, assistant professor		
<b>Semester</b>	1st, fall	<b>Contact hours/week</b>	1+2
<b>Level</b>	MSc	<b>ECTS</b>	3
<b>Teaching and Learning Methods:</b>	part of practical classes are held in seminar form		
<b>Reading:</b>	<p><b>Compulsory literature:</b></p> <ul style="list-style-type: none"> <li>- online teaching material available through the e-learning system of SZIU</li> <li>- Eds Taiz and Zeiger, Plant Physiology, Sinauer 3rd ed. 2002</li> </ul> <p><b>Recommended literature:</b></p> <ul style="list-style-type: none"> <li>- Eds Buchanan et al, Biochemistry and Molecular Biology of Plants, ASPP 2000</li> </ul>		
<b>Assessment:</b>	exam		