

1.	Course name: Plant physiology
2.	Course code conforms to USOS: 25-BI-S1-E+-PPh
3.	University department: Faculty of Biological Sciences, Institute of Experimental Biology, Department of Molecular Plant Physiology
4.	Course type: lecture (30 h)
5.	Degree: bachelor
6.	Semester: summer
7.	Number of hours: 30
8.	Name, Surname, academic title: Małgorzata Janicka, Professor (malgorzata.janicka@uwr.edu.pl) Ewa Młodzińska-Michta, PhD (ewa.mlodzinska-michta@uwr.edu.pl) Anna Wdowikowska, PhD (anna.wdowikowska@uwr.edu.pl)
9.	Course description/Content: Compartmentation in plant cell metabolism; long- and short-distance transport - mechanisms and regulation; energy conversion in biological membrane systems; photosynthetic transport of electrons and protons; PSI and PSII- structure and function; the Q cycle of cytochrome bc complexes; cyclic and non cyclic photophosphorylation; Calvin reaction in the C3, C4 and CAM plants; regulatory mechanisms of the key enzymes of the Calvin cycle; molecular mechanisms of photorespiration; regulatory mechanisms of the phloem assimilate transport; assimilation of nitrogen and sulphur
10.	Recommended literature: Plant physiology, 5 th edition, Lincoln Taiz, Eduardo Zeiger, Sinauer Associates 2010, ISBN13: 978-0878938667 Plant physiology and development, 6 th edition, Lincoln Taiz, Eduardo Zeiger, Ian M. Møller, and Angus Murphy, Sinauer Associates 2015, ISBN: 978-1-60535-255-8 Biochemistry and molecular biology of plants, 2 nd edition, Bob B. Buchanan, Wilhelm Gruissem, Russell L. Jones, Wiley Blackwell, 2015, ISBN: 978-0-470-71421-8
11.	Form of credit: Lecture: written test
12.	Language: English
13.	Number of ECTS: 3