

MODULE DESCRIPTION (SYLLABUS)

1.	Module: Plant Biology	
2.	Language of instruction: English	
3.	Faculty: Faculty of Biotechnology	
4.	Course/module code: 29-BT-S1-E1_ENPB (Lect.) 29-BT-S1-E1_ENPBc (Lab.)	
5.	Course/module type (<i>mandatory or elective</i>): mandatory	
6.	Programme: Biotechnology	
7.	Study cycle (<i>1st/2nd</i>): 1st cycle	
8.	Year: 1st	
9.	Semester (<i>autumn or spring</i>): autumn	
10.	Form of tuition and number of hours: Lecture: 15 h Laboratory: 15 h	
11.	Course coordinator(s): Lect.: Edyta Gola, PhD Lab.: Edyta Gola, PhD; Alicja Dołzbłasz, PhD; Katarzyna Sokołowska, PhD	
12.	Initial requirements (<i>knowledge, skills, social competences</i>): no requirements	
13.	Objectives: To acquaint student with basic knowledge of the plant cell and tissues, and with plant body structure and function.	
14.	Content: Structures and compartments specific to plant cell; selected issues on plant cell evolution; plant structure (organs, tissues), primary and secondary plant architecture; structural adaptations related to specific growth form, chosen aspects of the plant developmental biology.	
15.	Learning outcomes:	Outcome symbols:

	<p>Student knows the structure of the plant body and the plant cell organization, identifies the plant cell organelles and understands their functions. Student recognizes the structure and function of the main plant tissues and organs.</p> <p>Student knows the main types of microscopes and selected techniques used in the plant cell/tissues studies. Student uses light microscopes; performs basic histochemical reactions and identifies observed structures.</p> <p>Student follows the basic laboratory protocols and safety rules during the classes; is active and well organized and is able to cooperate in team work.</p>	<p>K1_W01, K1_U12</p> <p>K1_W08, K1_U01, K1_U07</p> <p>K1_U13, K1_K01, K1_K03, K1_K05</p>
16.	<p>Recommended literature:</p> <p>Selected articles and chapters from the following books:</p> <ul style="list-style-type: none"> • Alberts et al. "Molecular biology of the cell", 1994, 2005-2009, Garland Publishing; • P. H. Raven et al. "Biology of plants", 2005, Freeman and Company Publishers. 	
17.	<p>Methods of verification of the assumed learning outcomes:</p> <ul style="list-style-type: none"> • Lect.: written exam; • Lab.: written test and evaluation of the student's work in the lab. 	
18.	<p>Conditions of earning credits:</p> <ul style="list-style-type: none"> • active participation in laboratory classes; • completion of the exercises is based on a written test; • completion of the lecture is based on a written exam. 	
19.	Student's workload:	
	Activity	Number of hours for the activity
	Hours of instruction (as stipulated in study programme) :	30 h
	<ul style="list-style-type: none"> • Lect.: 15 h • Lab.: 15 h 	
	Student's own work:	30 h
	<ul style="list-style-type: none"> • preparation before classes: 10 h • preparation for the final exam: 20 h 	
	Total number of hours	60 h
	Number of ECTS:	3 ECTS
	<ul style="list-style-type: none"> • Lect.: 2 ECTS • Lab.: 1 ECTS 	