1.	Field of study	Biotechnology
2.	Academic year of entry	2018/2019 (winter term)
3.	Level of qualifications/degree	first-cycle studies
4.	Degree profile	general academic
5.	Mode of study	full-time

Module: Hormonal regulation of plant growth and development

Module code: 1BT_38

1. Number of the ECTS credits: 2

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
1BT_38_1	Defines, classifies and describes the basic terms used in plant growth and development	1BT_W11	5
1BT_38_2	Describes the structure of plant growth regulators	1BT_W05	2
1BT_38_3	Explains the mechanism of action of phytohormones	1BT_U03	3
		1BT_W05	2
1BT_38_4	Describes and explains the phenomena occurring during the growth and development of plants.	1BT_K06	5
		1BT_U03	2
		1BT_W05	1
1BT_38_5	Performs simple experiments, describes the effects of the experiment, analyzes the results, draws conclusions and presents them in the form of a report	1BT_K03	5
		1BT_U01	5
		1BT_U06	5
		1BT_W14	5

3. Module description

Description	The aim of the module is to provide the knowledge of structure and mechanism of action of plant growth regulators. IAA polar transport and role of phytohormones in response to abiotic stress, acid growth theory, effect of plant growth regulators on stomata functioning. Module available at the semester 5 and 6.
Prerequisites	Basic knowledge of botany and plant physiology

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
1BT_38_w_1	Activity during practicals	During practicals the following skills will be assessed: the use of laboratory equipment, proper experiment implementation, interpreting the results and conclusions drawing, preparing a written final report of the experiments performed.	1BT_38_5
1BT_38_w_2	Written colloquia	It covers issues discussed in lectures and information contained in recommended literature.	1BT_38_1, 1BT_38_2, 1BT_38_3, 1BT_38_4

5. Forms of teaching

code	form of teaching			required hours of student's own work		assessment of the learning outcomes of the module
	type	description (including teaching methods)	number of hours	description	number of hours	
1BT_38_fs_1	lecture	Lecture with the use multimedia devices	10	Working with manual, mastery of the material from the lecture	40	
1BT_38_fs_2	laboratory classes	Samodzielna praca w laboratorium, wykonywanie doświadczeń na podstawie instrukcji, analiza uzyskanych wyników.	20	Przygotowanie sprawozdań z ćwiczeń.	30	1BT_38_w_1