1.	Field of study	Biotechnology
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2020/2021 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

Module: Cell biology

Module code: 1BT_16A

1. Number of the ECTS credits: 6

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
1BT_16_1	Possess knowledge of the biology of eukaryotic cells.	1BT_W02_P	4
1BT_16_2	Classifies organelles of plants and animals cells.	1BT_W03_P	5
1BT_16_3	Explains the relationship between structure and function of eukaryotic cell organelles.	1BT_W09_P	4
1BT_16_4	Uses the basic microscopic methods for the analysis of structure and function of eukaryotic cells.	1BT_U01_P	4
1BT_16_5	Able to prepare the specimens for observation in light microscopy.	1BT_U04_P	4
1BT_16_6	Presents the results of work in the form of reports.	1BT_K02_P	4

3. Module description

Description	Module "Cell Biology" familiarize the student with the structure and functioning of eukaryotic cells. Students will acquire knowledge on the structure and function of all eukaryotic cell compartments of both plant and animal. Students will learn about the mechanisms of functioning of cells and the basics of their differentiation. The student learns the principles of working with the light microscope and stereomicroscope and the basis of preparation of biological material and the methods used in cell biology.
Prerequisites	Basic knowledge of the plant and animal organisms structure.

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
1BT_16_w_1	Coursework	according to the Syllabus	

			1BT_16_1, 1BT_16_2, 1BT_16_3, 1BT_16_4, 1BT_16_5, 1BT_16_6
1BT_16_w_2	Exam	according to the Syllabus	1BT_16_1, 1BT_16_2, 1BT_16_3, 1BT_16_4, 1BT_16_5

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_16_fs_1	discussion classes	lecture concerns selected topics from eukaryotic cell biology with the use of audio-visual aids - multimedia presentations to illustrate the issues discussed.	15	Individual acquisition of knowledge; work with basic, recommended in the literature in the syllabus and suppleIndividual acquisition of knowledge; work with basic, recommended in the literature in the syllabus and supplementary literature.mentary literature.	15	1BT_16_w_2
1BT_16_fs_2	laboratory classes	Work under the direction and supervision of lecturer - the acquisition of practical skills in the preparation of biological material based on the instructions. Analysis of specimens in light microscopy; analysis and documentation of obtained results (note, drawing), discussion.	60	Acquiring knowledge from lectures, work with the textbook, supplementary reading.	60	1BT_16_w_1