

MODULE DESCRIPTION (SYLLABUS)

1.	Module: Animal Biology
2.	Language of instruction: English
3.	Faculty: Faculty of Biotechnology
4.	Course/module code: 29-BT-S1-E1_ENAB (Lect.) 29-BT-S1-E1_ENABc (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.	Coordinator(s): Lect.: Magdalena Chmielewska, PhD Lab.: Magda Dubińska-Magiera, PhD; Marta Migocka-Patrzałek, PhD
12.	Initial requirements (<i>knowledge, skills, social competences</i>): no requirements
13.	Objectives: To acquaint student with basic knowledge of the structure and function of animal cell and tissues.
14.	Content: <ul style="list-style-type: none"> • Basic biology. • Molecular basis of life. • Animal cells: nucleus, cytoplasmic organelles, cell divisions. • Animal tissues: epithelial, connective, muscle and nervous.

15.	<p>Learning outcomes:</p> <p>Student knows the histological structure of animal cell and tissues, characterizes the cells types and extracellular components, explains the correlations of the cell and tissues structure and function.</p> <p>Student knows selected techniques used in the animal cell/tissues studies.</p> <p>Student uses light microscopes and identifies observed structures.</p> <p>Student follows the basic laboratory protocols and safety rules during the classes; the student is active and well organized.</p> <p>Student uses the theoretical knowledge to analyse histological sections. Is skillful in microscopic observations and able to identify animal tissues.</p> <p>Student is willing for microscopic observations, is able to cooperate in team work.</p>	<p>Outcome symbols:</p> <p>K1_W01, K1_U12</p> <p>K1_W08</p> <p>K1_U01, K1_U07</p> <p>K1_K03, K1_K05</p> <p>K1_W09, K1_U05</p> <p>K1_U13, K1_K01</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” • Lodish “Molecular Cell Biology” • M.H. Ross, W. Pawlina: Histology-a text and atlas with correlated cell and molecular biology <p>Selected articles chosen by teachers.</p>	
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, practical identification of histological sections 	
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
	<p>Hours of instruction (as stipulated in study programme) :</p> <ul style="list-style-type: none"> • Lect.: 15 h • Lab.: 15 h 	30 h
	<p>Student’s own work:</p> <ul style="list-style-type: none"> • preparation before classes: 10 h 	30 h

	<ul style="list-style-type: none"> • preparation for the test and final exam: 20 h 	
	Total number of hours	60 h
	Number of ECTS: <ul style="list-style-type: none"> • Lect.: 2 ECTS • Lab.: 1 ECTS 	3 ECTS