

Biology, Specialization: Medical Biology (BSc) – study schedule (2023/2024)

Language of instruction: English

Forms of classes: Lecture, LB – laboratory, KW – tutorial, CA – exercises, SM – seminar;

Ex – exam, Pg – pass with grade; O – obligatory course, E – elective course/module (chosen by students according to their individual preferences and interests)

1st semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Modern trends in biology	20	20	-	Pg	2	-
Basics of zoology	60	15	45 (LB)	Ex	5	-
Basics of botany	60	20	40 (LB)	Ex	5	-
Physics with elements of biophysics	60	20	40 (LB)	Ex	6	-
General chemistry with elements of analytical and physical chemistry	70	25	45 (LB)	Ex	6	-
Calculation in biology	20	-	20 (KW)	Pg	1	-
Utility software package	30	-	30 (LB)	Pg	2	-
Intellectual property protection NHS	15	15	-	Pg	1	-
Foreign language	30	-	30 (KW)	Pg	2	-
Total:	365				30	0
					30	

2nd semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Cell biology - an extensive course	90	30	60 (LB)	Ex	8	-
The elements of organic chemistry for biology students	60	30	30 (LB)	Ex	5	-
Basics of mycology	30	10	20 (LB)	Pg	2	-
Human anatomy - an extensive course	60	30	30 (LB)	Pg	5	-
Zoology field classes	30	-	30 (CT)	Pg	2	-
Botany field classes	30	-	30 (CT)	Pg	2	-
Parasitology	30	15	15 (LB)	Pg	2	
Elective courses in Humanities and Social Sciences (courses to be chosen from the given list)	30	30	-	Pg	-	2
Physical education	30	-	30 (KW)	Pg	0	-
Foreign language	30	-	30 (KW)	Pg	2	-
Total:	420				28	2
					30	

Total: 785 h, 60 ECTS

3rd semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Biochemistry	90	30	60 (LB)	Ex	8	-
General microbiology	60	30	30 (LB)	Ex	5	-
Genetics with elements of human genetics	60	30	30 (LB)	Ex	5	-
Human physiology	90	30	60 (LB)	Ex	6	-
Premedical first aid	30	-	30 (LB)	Pg	2	-
Radiology	15	15	-	Pg	1	-
Basics of <i>in vitro</i> animal cell culture	15	-	15 (LB)	Pg	1	-
Physical education	30	-	30 (KW)	-	0	-
Foreign language	30	-	30 (KW)	Pg	2	-
Total:	420				30	0
					30	

4th semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Histology with elements of embryology	30	15	15 (LB)	Pg	2	-
Molecular biology with elements of molecular diagnostics	60	30	30 (LB)	Ex	5	-
General ecology	60	15	45 (LB)	Ex	5	-
Mechanisms of evolution	45	30	15 (KW)	Ex	4	-
Elements of pathophysiology	15	15	-	Pg	1	-
Pharmacological botany	75	30	40 (LB) + 5 (CT)	Pg	5	-
Forensic entomology	30	15	15 (LB)	Pg	2	-
Biochemistry of nutrition	15	15	-	Pg	1	-
Elective courses in Humanities and Social Sciences (courses to be chosen from the given list)	15	15	-	Pg	-	1
Elective course in biology chosen from a given list	30	30	-	Pg	-	2
Foreign language	30	-	30 (KW)	Ex	2	-
Total:	405				27	3
					30	

Total: 825 h, 60 ECTS

5th semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Human immunology	60	30	30 (LB)	Ex	5	-
Environmental protection humans and environment	60	30	15 (LB) + 15 (CT)	Pg	4	-
Presentation of scientific results - training	15	-	15 (KW)	Pg	1	-
Physical basis of instrumental diagnostics and physiotherapy	30	20	10 (LB)	Pg	2	-
Applied biology in medicine	40	-	40 (LB)	Pg	3	-
Herbal medicine with elements of phytotherapy	70	30	40 (LB)	Ex	6	-
Genetic engineering	45	15	30 (LB)	Pg	4	-
Academic lecture	15	15	-	-	-	1
Specialization practical training	100	-	100 (KW)	Pg	4	-
Total:	435				29	1
					30	

6th semester

Courses	No. of hours	Lecture	Classes	Form of course completion	Credits ECTS	
					O	E
Plant physiology	60	30	30 (LB)	Ex	5	-
Basics of entrepreneurship	10	-	10 (KW)	Pg	1	-
Human evolution	30	15	15 (KW)	Pg	2	-
Medical aspects of toxicology	60	30	30 (LB)	Ex	5	-
Basics of pharmacology	45	15	30 (KW)	Pg	3	-
Human ecology	30	15	15 (KW)	Pg	2	-
Basics of medical biotechnology	30	30	-	Pg	2	-
Biomaterial engineering in medicine	15	15	-	Pg	1	-
Biochemical methods in clinical analysis	45	15	30 (LB)	Pg	4	-
Seminar	45	-	45 (SM)	Pg	3	
Diploma thesis + final exam	-	-	-	-	2	
Total:	370				30	0
					30	

Total: 805 h, 60 ECTS

Final count: 2415 h, 180 ECTS