## Annex 4 to programme documentation

## Programme plan Programme, level of studies BIOTECHNOLOGY (1st degree studies) BS course Academic Year 2023/2024- Cycle from 2021/2022

1

Predicted number of students starting the cycle

Year III Semester V COMPULSORY COURSES Number of ECTS Form of Number Total No. Course name Type of class teaching **Course instructor** assessment of groups hours Points hours lecture 15 Exam 15 dr Aleksandra Seta – Koselska, dr Małgorzata 4 1. Plant cell and tissue cultures class 30 Graded Pass 30 Poniewozik lecture 30 Exam 30 2. Industrial microbiology 6 class 45 Graded Pass 45 dr Marta Kłos SPECIALISATION COURSES - ELECTIVE (one to choose from) Specialisation: Experimental biotechnology Number of Form of Number Total ECTS No. Course name Type of class teaching **Course instructor** assessment of groups hours Points hours Specialisation: Experimental biotechnology lecture 30 30 Analytical methods in biotechnology -Exam 5 1. Katedra Biologii i Biotechnologii extended course class 30 Graded Pass 30 Mikroorganizmów Technologies and bioprocess 15 15 lecture Exam Katedra Biologii i Biotechnologii 2. 5 engineering - basic course 30 Graded Pass Mikroorganizmów, mgr Kamila Górka class 30 lecture 15 Graded Pass 15 3. Experimental toxicology 4 class 30 Graded Pass 30 dr Radosław Mencfel . dr Tomasz Lenard **ELECTIVE COURSES Seminars (one to choose from)** Number of Form of Number ECTS Total teaching **Course instructor** Course name Type of class No. assessment of groups hours Points hours Methods of the xenobiotic cytotoxicity seminar 30 2 dr hab. Anna Sierosławska, prof. KUL 1. Pass 30 analysis **ELECTIVE COURSES Practical placement - 4 weeks** Number of ECTS Form of Number Total No. Course name Type of class teaching **Course instructor** assessment of groups hours Points practical Practical placement 1. 130 Pass 130 4 dr hab. Anna Sierosławska, prof. KUL placement

NUMBER OF TEACHING HOURS PER SEMESTER PER	
STUDENT:	300
ECTS POINTS PER SEMESTER PER STUDENT:	30

## Programme plan Programme, level of studies BIOTECHNOLOGY (1st degree studies) BS course Academic Year 2023/2024- Cycle from 2021/2022

## Predicted number of students starting the cycle 1

Year III Semester VI

				COMPULSO	RY COURSES			
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Animal cell and tissue cultures	lecture	15	Exam	1	15	4	
1.		class	30	Graded Pass	1	30		dr hab. Anna Sierosławska, prof. KUL
2.	Economics of production	class	15	Graded Pass	1	15	1	dr Katarzyna Jabłońska – Karczmarczyk
	ELECTIVE COURSES Monographic lectures (one or two to choose from – for 2 ECTS credits)							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	Course instructor
1.	Food toxicology	lecture	15	Graded Pass	1	15	2	dr Tomasz Lenard
2.	Virology and epidemiology	lecture	15	Graded Pass	1	15	1	dr hab. inż. Andrea Baier
	SPECIALISATION COURSES - ELECTIVE (one to choose from)							
			Speciali	sation: Experir	nental biote	chnology		
1.	Immunology with immunodiagnostics	lecture	15	Exam	1	15	5	
		class	30	Graded Pass	1	30		dr hab. Anna Rymuszka, prof. KUL
2.	Bioprocess strategies	lecture	30	Exam	1	30	6	Katedra Biologii i Biotechnologii
		class	30	Graded Pass	1	30		Mikroorganizmów
	ELECTIVE COURSES Seminars (one to choose from). Bachelor's thesis and preparation for diploma examination - student is required to prepare bachelor's							
No.	Course name	Type of class	Number of teaching hours	Form of assessment	Number of groups	Total hours	ECTS Points	
1.	Methods of the xenobiotic cytotoxicity analysis	seminar	30	Pass	1	30	2	dr hab. Anna Rymuszka, prof. KUL
2.	Bachelor's thesis and preparation for diploma examination	final thesis	0	Pass	1	0	10	dr hab. Anna Rymuszka, prof. KUL, dr hab. Anna Sierosławska, prof. KUL

NOMBER OF TERCHING HOORS FER SEMESTER FER	
STUDENT:	225
ECTS POINTS PER SEMESTER PER STUDENT:	30

NUMBER OF TEACHING HOURS PER CYCLE PER	
STUDENT:	2010
ECTS POINTS PER CYCLE PER STUDENT:	180