

STUDY PROGRAMME CURRICULUM

MOLECULAR AND FUNCTIONAL BIOLOGY

2026/2027

Name of study programme	Molecular and functional biology
Programme characteristics	
Type	master's
Cycle	master
University of Ljubljana members	• Biotechnical Faculty, Jamnikarjeva ulica 101, 1000 Ljubljana, Slovenija

Year 1, obvezni

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0625653	Molecular Biology of the Gene	Cene Gostinčar, Matej Butala	45	0	60	0	15	105	225	9	2nd semester	no
2.	0625654	Molecular Biology of Membranes	Kristina Sepčič	45	30	30	0	15	105	225	9	2nd semester	no
3.	0625655	Functional Cell Biology	Marjana Regvar, Marko Kreft, Nada Žnidaršič	60	15	30	0	0	120	225	9	1st semester	no
4.	0625656	Genetics of Eukaryotes	Uroš Petrovič	60	0	45	0	0	120	225	9	1st semester	no
5.	0625657	Embryology	Lilijana Bizjak Mali, Rok Kostanjšek	50	10	45	0	10	110	225	9	1st semester	no
6.	0625658	Neurobiology	Gordana Glavan, Marko Kreft	45	15	30	0	15	120	225	9	2nd semester	no
7.	0625607	Elective Subjects		0	0	30	0	30	90	150	6	1st semester, 2nd semester	yes

	Total	305	70	270	0	85	770	1500	60	
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Year 2, obvezni

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0625660	Molecular Mechanisms of Toxicity	Damjana Drobne	45	0	15	0	15	75	150	6	1st semester	no
2.	0625661	Human Physiology	Marko Kreft	20	10	15	0	25	80	150	6	1st semester	no
3.	0625662	Master of Science Thesis	Visokošolski učitelj s habilitacijo	0	0	0	0	0	750	750	30	2nd semester	no
4.	0625663	Genomics and Proteomics	Cene Gostinčar, Matej Butala	30	30	15	0	0	75	150	6	1st semester	no
5.	0625664	Plant Growth and Development	Marjana Regvar	30	0	30	0	15	75	150	6	1st semester	no
6.	0625665	Elective Subjects		0	0	0	0	0	150	150	6	1st semester	yes
Total				125	40	75	0	55	1205	1500	60		

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				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0625666	Functional Morphology of Animals	Nada Žnidaršič, Rok Kostanjšek	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
2.	0625667	Symbionts and Parasites of Animals	Rok Kostanjšek	30	15	0	0	0	30	75	3	1st semester, 2nd semester	yes
3.	0625668	Plant Biotic Interactions	Marjana Regvar	20	10	15	0	0	30	75	3	1st semester, 2nd semester	yes

4.	0625669	Summer School of Sensory Ecophysiology	Marko Kreft	10	0	30	0	5	30	75	3	1st semester, 2nd semester	yes
5.	0625670	Cancer Biology	Maja Čemažar	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
6.	0625671	Natural products and their applications	Matej Skočaj	15	15	0	0	0	45	75	3	1st semester, 2nd semester	yes
7.	0625672	Microscopy of Biological Systems	Nada Žnidaršič	5	10	30	0	0	30	75	3	1st semester, 2nd semester	yes
8.	0625673	Biophysics	Andrej Vilfan	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
9.	0625674	Biomolecules in Industry	Nina Gunde Cimerman	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
10.	0625675	Interactions of Patogenic Microbes with Hosts	Martina Turk, Nina Gunde Cimerman	20	10	15	0	0	30	75	3	1st semester, 2nd semester	yes
11.	0625677	Molecular Cell Physiology	Marko Kreft, Robert Zorec	20	10	15	0	0	30	75	3	1st semester, 2nd semester	yes
12.	0625678	Nevroethology	Janko Božič	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
13.	0625679	Human Postnatal Growth and Development	Tatjana Robič Pikel	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
14.	0625680	Plant Molecular Biology and Biotechnology	Jana Žel, Kristina Gruden, Maja Ravnikar, Marina Dermastia	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
15.	0625681	Immunology	Alojz Ihan, Andreja Nataša Kopitar	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
16.	0625682	Pharmacology	Katarina Černe, Metoda	30	0	0	0	5	40	75	3	1st semester, 2nd semester	yes

			Lipnik Štangelj										
17.	0625683	BASICS OF THEORETICAL AND SYSTEMS BIOLOGY	Igor Jerman	30					45	75	3	1st semester, 2nd semester	yes
18.	0625684	Scientific Communication and Intellectual Property	Andrej Blejec, Peter Maček, Peter Trontelj	25	15	0	0	0	35	75	3	1st semester, 2nd semester	yes
19.	0625685	Analysis and Visualisation of Biological Data	Cene Gostinčar, Matevž Likar, Tomaž Skrbinšek	30	0	15	0	0	30	75	3	1st semester, 2nd semester	yes
Total				475	85	240	0	10	615	1425	57		