

## COURSE CERTIFICATE

№ 02MOLBIO-0223-2-5

Date of issue 19/01/2024

This is to certify that

**Умбарова Малика Улугбековна**

Successfully completed the course

**METHODS OF MOLECULAR BIOLOGY**

2 credits

The description of the course and the achieved learning results are given in the appendix to this certificate.

E-CERTIFICATE

<https://open.spbstu.ru/certificate/02MOLBIO-0223-2-5.pdf>



acting Vice-rector for Educational  
Activities  
Ludmila V. Pankova

# Умбарова Малика Улугбековна

STUDENT ID 3601310

PETER THE GREAT ST. PETERSBURG POLYTECHNIC UNIVERSITY  
<http://www.spbstu.ru/>

THE NAME OF THE COURSE METHODS OF MOLECULAR BIOLOGY  
<https://openedu.ru/course/spbstu/MOLBIO/>

## LEAD-TIME

From September 24, 2023 to December 31, 2023

## Assessment, number of hours and credits per course

Credits	Hours		Assessment		
	General	Academic	100-point	5-point	Letter
2	54	72	87	4	B

## GRADING POLICY

Evaluation scale ranges (100-point scale)	Score (5-point scale)	Letter
90-100	5	A
75-89	4	B
60-74	3	C
0-59	2	F

## COURSE PROGRAM

- Module 1. Molecular biology of viruses
- Module 2. Molecular biology of bacteria
- Module 3. Molecular plant biology
- Module 4. Molecular biology of animals
- Module 5. Molecular biology and medicine
- Module 6. Final project

## LEARNING OUTCOMES

After completing this course, student will be able to:

- see the correlation of molecular biology techniques with advances in related fields of science;

- understand the specifics of methods related to the study, regulation and application of proteins and nucleic acids;
- interpret information on differences in molecular biological processes in pro- and eukaryotes;
- analyze the interaction of regulatory and functional elements of molecular-biological processes;
- apply the knowledge gained within the course in simulation and modeling, risk assessment, when writing articles, reviews, reports, developing cases and for analysis of the information perceived.

### SCORING FORMULA

Nº	Assessment Type	Points scored	Maximum score	Quotient
1	Tests	85	100	0,50
2	Final Project	100	100	0,25
3	Final Exam	80	100	0,25
4	Final Score	87	100	1



Appendix to the certificate №  
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