
Academic Program Description

**Reviewing the performance of a high education institutions
(interview of academic program)**

Academic Program Description

This description of the academic program provides summary of the most important of the program properties, and the learning outcomes is expected from the student to achieve , proofing whether if he might investigate minimum benefit from available chances, and it is accompanied by a description of each curriculum within the program.

1.	Educational Institution	University Of Mosul
2.	University Department / The Center	Life Science (Biology)
3.	Academic Program Name	Biology
4.	Final Certification Name	Bachelor's Degree (Biology And Microbiology)
5.	Study System	Courses Or Semester
6.	Accreditation Program	ABET
7.	Date Of Description Preparation	2023
8.	Goal of Academic program:	<p>Objective of the program are set by department's administration. what the program submits it of preparation level or acquiring of student with skills , knowledge, and information during the study years and for all stages of the overall materials that consist of the program.</p>

10 – Required of education outcome, education of methods, education, and assessment

A- The knowledge and comprehension

- 1- Enabling the student from surrounded by biology topic .
- 2- Understanding of student what the genetic material and its chemical structure
- 3- Understanding of student mechanisms of genetic material transmission
- 4- Understanding of the student mechanisms of genetic material replication and then transcription of genetic material and translation it into build of peptide chains .

B- Subject -specific skill

- 1- Ability student to teach of biology.
- 2- Enables student to work in health institutions and laboratories.
- 3- Enables student to work in research institutions.

Methods of teaching and learning

Practical , Theoretical , Applied lectures, daily assignments, and discussions.

Assessment methods

Examination ,assignments , daily assignments , discussions ,laboratories reports and graduation projects.

C. Thinking skills

1. Short surprise quiz
2. Semester examination

Learning and teaching methods

Lectures ,scientific experiments , HomeWorks , scientific discussions ,applications

Assessment methods

Exams, assignments, daily assignments ,discussions ,laboratories reports
,graduations projects

**D. General and transmitted skills (other skills related to ability to job
and personal development**

1. Ability to work in team multi specializations.

2. Ability to communicate effectively

Learning and teaching methods

Lectures ,scientific experiments , HomeWorks , scientific discussions
,applications

Assessment methods

Exams, assignments, daily assignments ,discussions ,laboratories reports
,graduations projects

Program framework

Undergraduate

Coding	Practical hours No.	Theoretical hours No.	Study system	Subject name	No.	Stage
SCBI10-F1011	3	2	semester	General Biology	.1	First
SCBI10- F1021	3	2	semester	Analytical and Organic Chemistry	.2	
SCBI10- F1031	-	2	semester	Mathematics and Statistics	.3	
SCBI10- F1041	3	2	semester	Computers Semester	.4	
SCBI10- F1071	3	2	semester	Physics	.5	
SCBI10- S1051	3	2	semester	Earth Science Quarterly	.6	
SCBI10-S1061	-	2	semester	University Culture (Health)	.7	
SCBI10- F1081	-	2	semester	University Culture (Democracy)	.8	
SCBI10- F2011	3	2	Semester	Biochemistry	.1	Second
SCBI10- F2021	3	2	Semester	Invertebrates and parasites	.2	
SCBI10- F2031	3	2	Semester	Anatomy and classification of plants	.3	
SCBI10- F2041	3	2	Semester	Insects	.4	
SCBI10- F2051	3	2	Semester	Microbiology	.5	
SCBI10- F2061	3	2	Semester	Calculators	.6	
SCBI10- S2071	3	2	Semester	Plant groups	.7	
SCBI10- S2081	-	2	Semester	University culture	.8	
SCBI10- F2091	-	2	Semester	University culture	.9	
SCBI10- F3091	3	2	Semester	Histology and physiology	.1	Third/Microbiology
SCBI10- F3021	3	2	Semester	genetics and cell	.2	
SCBI10- F3031	3	2	Semester	Environment and pollution	.3	
SCBI10-F3041	3	2	Semester	Computers	.4	

SCBI10- S3101	3	2	Semester	Soil microbiology	.5		
SCBI10- F3131	3	2	Semester	Water microbiology	.6		
SCBI10- S3111	3	2	Semester	Classification of bacterial groups	.7		
SCBI10- F3121	3	2	Semester	Bacterial physiology	.8		
SCBI10-F3011	3	2	semester	Fungi and plant diseases	.1	Third/biology	
SCBI10- F3031	3	2	semester	Environment and pollution	.2		
SCBI10-F3041	3	2	semester	Computers	.3		
SCBI10- S3051	3	2	semester	Applied insects	.4		
SCBI10- S3061	3	2	semester	Diagnosis of parasites	.5		
SCBI10- F3071	3	2	semester	Histology	.6		
SCBI10- F3081	3	2	semester	Biotechnology	.7		
SCBI10- F4071	3	2	semester	Molecular biology and genetics of bacteria	.1		Fourth/Microbiology
SCBI10- F4111	3	2	semester	Food and industrial bacteria	.2		
SCBI10- F4121	3	2	semester	Pathogenic bacteria and viruses	.3		
SCBI10- F4131	3	2	semester	Fungi and classification of fungi	.4		
SCBI10- S4151	3	2	semester	Enzymes	.5		
SCBI10- S4141	3	2	semester	immunity	.6		
SCBI10- F4161	3	2	semester	Biodiversity	.7		
SCBI10- F4011	3	2	semester	Animal physiology	.1	Fourth/Biology	
SCBI10- F4021	3	2	semester	Plant physiology	.2		
SCBI10- S4031	3	2	semester	Embryos	.3		
SCBI10- S4051	3	2	semester	Comparative anatomy	.4		
SCBI10- S4061	3	2	semester	Allelopathy	.5		
SCBI10- S4041	3	2	semester	Quantitative genetics	.6		
SCBI10- F4101	3	2	semester	Molecular biology	.7		
SCBI10- F4081	3	2	semester	Natural history	.8		
SCBI10- F4091	3	2	semester	Biodiversity	.9		

Postgraduate

Coding	Theoretical hour No.	Study system	Name topics	NO.	Stage
SCBI10-S6011	2	Semester	Advanced microbial physiology	.1	Master
SCBI10-S6021	2	Semester	Advanced microbial genetics	.2	
SCBI10-S6031	2	Semester	Taxonomy of microbiology	.3	
SCBI10-S6041	2	Semester	Biochemistry of microorganisms	.4	
SCBI10-S6051	2	Semester	English language	.5	
SCBI10-S6061	2	Semester	Applied microbiology	.6	
SCBI10-S6071	2	Semester	Advanced parasitology	.7	
SCBI10-S6081	2	Semester	Invertebrates	.8	
SCBI10-S6091	2	Semester	Animal physiology	.9	
SCBI10-S6101	2	Semester	Advanced biochemistry	.10	
SCBI10-S6111	2	Semester	Advanced histology	.11	
SCBI10-S6121	2	Semester	Plant metabolism	.12	
SCBI10-S6 131	2	Semester	Quantitative genetics	.13	
SCBI10-S6141	2	Semester	Plant tissue culture and Biotechnologies	.14	
SCBI10-S6151	2	Semester	physiology and fungal toxins	.15	
SCBI10-F6161	2	Semester	Advanced viruses	.16	
SCBI10-F6171	2	Semester	Microbial pathology	.17	
SCBI10-F6181	2	Semester	Computers and the Internet	.18	
SCBI10-F6191	2	Semester	Serology	.19	
SCBI10-F6201	2	Semester	Insect biology	.20	
SCBI10-F6211	2	Semester	Biodiversity and evolution	.21	
SCBI10-F6221	2	Semester	Embryos	.22	
SCBI10-F6231	2	Semester	Molecular biology	.23	
SCBI10-F6241	2	Semester	Environment and pollution	.24	
SCBI10-F6251	2	Semester	Algae and archaea	.25	
SCBI10-F6261	2	Semester	Design and analysis of experiments	.26	

Coding	Theoretical hour No.	Study system	Name topics	NO.	Stage
SCBI10-S7011	2	Semester	Advanced metabolism	.1	Doctoral
SCBI10-S7021	2	Semester	Classification and pathogenesis of microorganisms	.2	
SCBI10-S7031	2	Semester	Biochemistry	.3	
SCBI10-S7041	2	Semester	Computers and Internet	.4	
SCBI10-S7051	2	Semester	Molecular genetics	.5	
SCBI10-S7061	2	Semester	Primary science and worms	.6	
SCBI10-S7071	2	Semester	Animal physiology	.7	
SCBI10-S7081	2	Semester	Comparative anatomy	.8	
SCBI10-S7091	2	Semester	Molecular genetics	.9	
SCBI10-S7101	2	Semester	Advanced plant biochemistry	.10	
SCBI10-F7111	2	Semester	Advanced molecular biology	.11	
SCBI10-S7121	2	Semester	Plant Taxonomy	.12	
SCBI10-S7131	2	Semester	Environmental physiology	.13	
SCBI10-F7141	2	Semester	Genetic analysis	.14	
SCBI10-F7151	2	Semester	Molecular viruses	.15	
SCBI10-F7161	2	Semester	The environment of microorganisms and their toxins	.16	
SCBI10-F7171	2	Semester	Advanced immunity	.17	
SCBI10-F7191	2	Semester	English language	.18	
SCBI10-F7201	2	Semester	Animal groups	.19	
SCBI10-F7211	2	Semester	Advanced entomology	.20	
SCBI10-F7221	2	Semester	Tissue changes	.21	
SCBI10-F7231	2	Semester	Biotechnologies	.22	
SCBI10-F7241	2	Semester	Animal environment	.23	
SCBI10-F7251	2	Semester	Advanced plant ecology	.24	
SCBI10-F7261	2	Semester	Bioplant physiology	.25	
SCBI10-F7271	2	Semester	Applied mycology	26	