

BACHELOR'S TRAINING OFFER

Establishment	Faculty	Department
Djilali Bounaama University of Khemis Miliana	Natural and Life Sciences & Earth Sciences	Biological Sciences

Field	Branch	Speciality
Natural and Life Sciences	Biotechnology	Microbial Biotechnology

First semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental unit (UEF)	<i>General and organic chemistry</i>	6	3	1h30	1h30	1h30	67h30
	<i>Cell biology</i>	8	4	1h30	1h30	3h00	90h00
	<i>Mathematics and statistics</i>	4	2	1h30	1h30		45h00
Methodological unit (UEM)	<i>Geology</i>	5	3	1h30	1h30	1h00	60h00
	<i>Communication and expression Techniques</i>	4	2	1h30	1h30		45h00
Discovery unit (UED)	<i>Working method and terminology</i>	2	2	1h30	1h30		45h00
Transversale unit (UET)	<i>Universal history of biological sciences</i>	1	1	1h30			22h30

Second semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental unit (UEF)	<i>Thermodynamics and solution chemistry</i>	6	3	1h30	1h30	1h30	67h30
	<i>Plant Biology</i>	6	3	1h30		3h00	67h30
	<i>Animal Biology</i>	6	3	1h30		3h00	67h30
Methodological unit (UEM)	<i>Physics</i>	5	3	1h30	1h30	1h00	60h00
	<i>Communication and expression techniques 2</i>	4	2	1h30	1h30		45h00
Discovery unit (UED)	<i>Life sciences and socio-economic impacts</i>	2	2	1h30	1h30		45h00
Transversale unit (UET)	<i>Working method and terminology</i>	1	1	1h30			22h30

Third semester

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
Fundamental unit (UEF)	<i>Introduction to biotechnology</i>	6	3	3h00	1h30		67h30
	<i>Biochemistry</i>	6	3	3h00	1h30		67h30
	<i>Genetics</i>	6	3	3h00	1h30		67h30
Methodological unit (UEM)	<i>Communication and expression techniques</i>	4	2	1h30	1h30		45h00
	<i>Biophysics</i>	5	3	1h30	1h30	1h00	60h00
Discovery unit (UED)	<i>Environment and sustainable development</i>	2	2	1h30	1h30		45h00
Transversale unit (UET)	<i>University ethics and deontology</i>	1	1	1h30			22h30

Fourth semester

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
Fundamental Unit (UEF)	<i>Biotechnology and applications</i>	6	3	3h00	1h30		67h30
	<i>Microbiology</i>	8	4	3h00	1h30	1h30	90h00
	<i>Immunology</i>	4	2	1h30	1h30		45h00
Methodological unit (UEM)	<i>Scientific methodology and techniques for studying life</i>	4	2	1h30		1h30	45h00
	<i>Biostatistics</i>	5	3	1h30	1h30	1h00	60h00
Discovery unit (UED)	<i>General ecology</i>	2	2	1h30	1h30		45h00
Transversale unit (UET)	<i>Computer tools</i>	1	1	1h30			22h30

Fifth semester

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
Fundamental unit (UEF)	<i>Elements of molecular genetics of microorganisms</i>	3	6	3h00	1h30		67h30
	<i>Bacterial taxonomy</i>	3	6	1h30		3h00	67h30
	<i>Microbial biochemistry</i>	3	6	3h00		1h30	67h30
Methodological unit (UEM)	<i>Molecular biology</i>	2	4	1h30	1h30		45h00
	<i>Microbial genetics</i>	3	5	1h30	1h00	1h30	60h00
Discovery unit (UED)	<i>Hygiene and safety in laboratories</i>	3	3	3h00		1h30	67h30

Six semester

Teaching unit	Matter	Credit	Coefficient	Course	TD	TP	HV
Fundamental unit (UEF)	<i>Environmental and infectious virology</i>	3	6	3h00	1h30		67h30
	<i>Microbiological engineering</i>	2	4	1h30	1h30		45h00
	<i>Microbial ecology</i>	4	8	3h00	1h30	1h30	90h00
Methodological unit (UEM)	<i>Microbiological control techniques</i>	3	5	1h30	1h00	1h30	60h00
	<i>Biochemical analysis techniques</i>	2	4	1h30		1h30	45h00
Transversale unit (UET)	<i>Documentation techniques</i>	3	3	1h30	3h00		67h30

Overall summary of the training

VH \ UE	UEF	UEM	UED	UET	Total
Course	675	180	112.5	90	1059
TD	337.5	135	22.5	45	540
TP	540	22.5	67.5	-	630
Personal work	1175	325	150	135	1785
Total	2728	663	353	270	4014
Credits	123	29	17	11	180
% in credits for each EU	60%	30%	5.90%	4.10%	100%