DEMOCRATIC PEOPLE'S REPUBLIC OF ALGERIA

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

HASSIBA BENBOUALI CHLEF UNIVERSITY

HARMONIZATION

MASTER TRAINING OFFER

Academic

Establishment	Faculty	Department
Hassiba Benbouali Chlef University	**Faculty of Science**	**Biology**

Domain: Natural and life sciences
Sector: Biological Sciences
Specialty: Molecular Biology of Microorganisms

Semi-annual organizational sheet of lessons

(Please submit 4 semester sheets)

1- Semester 1:

Teaching Unit	WHYV	V.H weekly				Coeff	Credits	Mode of evaluation	
	14-16 weeks	C	T	PW	Other			Continuous	Test
Fundamental TU									
FTU1(O/P)									
Subject 1:**Diversity and ecology of microorganisms**	67h30	1h30	1h30	1h30	82h30	3	6	2	1
Subject 2:**Metabolism and Microbial Physiology**	67h30	1h30	1h30	1h30	82h30	3	6	2	1
FTU 2(O/P)									
Subject 1: **Molecular Microbiology**	67h30	3am	1h30		82h30	3	6	2	1
Methodology TU									
MTU 1(O/P)									
Subject 1: **Microbiological analysis techniques**	60h	1h30	1h30	1h	65h	3	5	2	1
Subject 2:**Eukaryotic molecular genetics**	45h	1h30	1h30		55h	**2**	**4**	2	1
Discovery TU									
DTU 1(O/P)									
English Scientific I	45h	1h30	1h30		5h	**2**	**2**	2	1
Transversales TU									1
TTU 1(O/P)									
Subject 1: **Communication**	22h30	1h30			2h30	**1**	**1**	2	1
Total Semester 1	**375 h**	**12h**	**9h**	**4h**	**375 h**	**17**	**30**		

2- Semester 2:

Teaching Unit	WHYV	V.H weekly				Coeff	Credits	Mode of evaluation	
	14-16 weeks	C	T	PW	Other		14-16 weeks	Continuous	Test
Fundamental TU									
FTU 1(O/P)									
Subject 1: **Cell Biology**	67h30	1h30	1h30	1h30	82h30	3	6	2	1
FTU 2(O/P)									
Subject 1: **Molecular virology**	67h30	3am	1h30		82h30	3	6	2	1
Subject 2: **Molecular immunology**	67h30	3am	1h30		82h30	3	6	2	1
Methodology TU									
MTU 1(O/P)									
Subject 1: **Analysis of experimental data in biology**	45h	1h30		1h30	55h	2	4	2	1
Subject 2: **Bioinformatics and Genomics of micro-organisms**	60h	1h30	1h30	1h	65h	3	5	2	1
Discovery TU									
DTU (O/P)									
Subject 1: **Mechanisms of action and resistance of microorganisms**	45h	1h30	1h30		5h	2	2	2	1
Transversales TU									
TTU 1(O/P)									
Legislation	22h30	1h30			2h30	1	1	2	1
Total Semester 2	**375 h**	**13h30**	**7h30**	**4h**	**375 h**	**17**	**30**		

3- Semester 3:

Teaching Unit	WHYV	V.H weekly				Coeff	Credits	Mode of evaluation	
	14-16 weeks	C	T	PW	Other			Continuous	Test
Fundamental TU									
FTU 1(O/P)									
Subject 1:**Interactions host-pathogens**	67h30	1h30	1h30	1h30	82h30	3	6	2	1
Subject 2: **Infectious microbiology**	67h30	1h30		3am	82h30	3	6	2	1
FTU 2(O/P)									
Subject 1: **Regulation of gene expression**	67h30	3am	1h30		82h30	3	6	2	1
Methodology TU									
MTU 1(O/P)									
Subject 1: **Biochemical and Molecular analysis techniques**	60h	1h30	1h30	1h	65h	3	5	2	1
Subject 2: **Microbial Biotechnology**	45h	1h30	1h30		55h	2	4	2	1
Discovery TU									
DTU 1(O/P)									
English Scientific II	45h	1h30	1h30		5h	2	2	2	1
Transversales TU									
TTU 1(O/P)									
Subject 1: **Professional integration**	22h30	1h30			2h30	1	1	2	1
Total Semester 3	**375 h**	**12h**	**7h30**	**5h30**	**375 h**	**17**	**30**		

4- Semester 4:

Domain : Natural and Life Sciences
Sector : Biological Sciences
Specialty: Molecular biology of microorganisms

Internship in a company, followed by a brief and a defence.

	WHYV	Coeff	Credits
Work Personal	225	09	18
In-company internship	150	06	12
Seminars			
Other (specify)			
Total Semester 4	375	15	30

5- Overall summary of the training: (indicate the separate global WV in courses, T, PW for the 04 teaching semesters, for the different types of TU)

TU / WV	FTU	MTU	DTU	TTU	Total
Course	315	135	67.5	67.5	585
T	180	90	67.5	-	315
PW	135	90	-	-	247.5
Personal work	967.5	360	15	7.5	1350
ESP internship		150			150
Total	1597.5	825	150	75	2647.5
Credits	72	39	6	3	120
% in credits for each TU	60	32.5	5	2.5	100%