DEMOCRATIC AND POPULAR ALGERIAN REPUBLIC

**MINISTRY OF HIGHER EDUCATION
AND SCIENTIFIC RESEARCH**

HARMONIZATION

MASTER TRAINING OFFER

ACADEMIC

Establishment	Faculty / Institute	Department
Mentouri Brothers University, Constantine	Natural and life sciences	Biochemistry and Cellular and Molecular Biology

Field: Natural and life sciences

Sector: Biological Sciences

Speciality : Biochemistry

Academic year: 2019/2020

Semester 1

Teaching Unit	VHS	VH weekly				Coefficient	Credits	Assessment method	
	14-16 weeks	C	TD	TP	Others			Continuous (40%)	Exam (60%)
UEF1 (O/P): Bioenergetic biochemistry and pathologies	**112:30 p.m.**	**6 a.m.**	**1h30**		**137h30**	**5**	**10**		
Subject 1: Bioenergetics	67h30	3 hours	1h30	-	82h30	3	6	(40%)	(60%)
Subject 2: Metabolic biochemistry, nutritional needs	45 hours	3 hours		-	55h	2	4	(40%)	(60%)
UEF2 (O/P): Nutrition and pharmacology	**90 hours**	**4:30 a.m.**		**1h30**	**110h**	**4**	**8**		
Subject 1: Human nutrition and pathologies	45 hours	3 hours			55h	2	4	(40%)	(60%)
Subject 2: Molecular Pharmacology	45 hours	1h30		1 hour 30 minutes	55h	2	4	(40%)	(60%)
UE M1 O/P): Methods of studying proteins	**105h**	**4:30 a.m.**		**2h30**	**120h**	**5**	**9**		
Subject 1: Classical Protein Analysis Techniques	45	1h30	-	1h30	55h	2	4	(40%)	(60%)
Subject 2: Biostatistics	60 hours	3 hours		1 hour	65 hours	3	5		
EU Discovery	45h00	1h30	1h30		5h	2	2		
Subject 1: Scientific English (Analysis of Scientific Articles)	45	1h30	1h30-	-	5h	2	2	(40%)	(60%)
Cross-Cutting EU	**10:30 p.m.**	**1h30**	**-**		**2h30**	**1**	**1**		
Subject 2 : Communication (ICT)	10:30 p.m.	1h30		-	2h30	1	1	0%	100%
Total Semester 1	375 hours	6:00 p.m.	3:00 a.m.	4:00 a.m.	375 hours	17	30		

Teaching Unit 1h30	VHS	VH weekly				Coefficient	Credits	Assessment method	
	14-16 Weeks	C	TD	TP	Others			Continuous (40%)	Exam (60%)
UEF3 (O/P): Proteomic and Nutrition Analysis	**90 hours**	**6:00 a.m.**			**110h**	**5**	**10**		
Subject 1: Proteomic Analysis	45 hours	3:00 a.m.	-		55h	2	4	**(40%)**	**(60%)**
Subject 2: Nutritional status and pathologies	45 hours	3:00 a.m.	-		55h	3	6	**(40%)**	**(60%)**
UEF4 (O/P): Gene expression and nutritional therapy	**112:30 p.m.**	**6:00 a.m.**	**1h30**	**-**	**137h30**	**4**	**8**		
Subject 1: Nutritional therapies	67h30	3 hours	1h30-	-	82h30	2	4	**(40%)**	**(60%)**
Subject 2: Gene Regulation	45 hours	3 hours	-	-	55h	2	4	**(40%)**	**(60%)**
UE M2 (O/P): Methodology Analysis tools	**105h**	**4:30 a.m.**	**1h30**	**1 hour**		**5**	**9**		
Subject 1: Statistical Methods in Biology	60	1h30	1h30	1 hour	65 hours	2	4	**(40%)**	**(60%)**
Subject 2: Bioinformatics and Proteomics	45	3 hours			55h	3	5		
EU Discovery	**45 hours**	**1h30**	**1h30**		**5h**	**2**	**2**		
Subject 1 : Scientific English	45 hours	1h30	1h30		5h	2	2	**(40%)**	**(60%)**
Cross-Cutting EU	**10:30 p.m.**	**1h30**			**2h30**	**1**	**1**		
UET: Legislation	10:30 p.m.	1h30			2h30	1	1	0%	100%
Total Semester 2	**375 hours**	**7:30 p.m.**	**4:30 a.m.**	**1 hour**	**375 hours**	**17**	**30**		

2-Semester 2

3- Semester 3

Teaching Unit	VHS	VH weekly				Coefficient	Credits	Assessment method	
	14-16 weeks	C	TD	TP	Others			Continuous (40%)	Exam (60%)

	8:30 p.m.	7:30 a.m.	0:00	6:00 a.m.	247h630	9	18		
UEF4 (O/P): Biotechnology									
Subject 1 : Biotechnology1: main areas of Biotechnology	90 hours	3:00 a.m.	-	3 hours	110h	4	8	**(40%)**	**(60%)**
Subject 2 : Biotechnology 2: Protein engineering for therapeutic purposes	45 hours	1h30	-	1h30	55h	2	4	**(40%)**	**(60%)**
Subject 3: Toxicology and Food Safety	67h30	3:00 a.m.	-	1h30	82h30	3	6	**(40%)**	**(60%)**
UE M 3 (O/P): Methodology	**105h**	**3 hours**	**2h30**		**120h**	**5**	**9**		
Subject 1: Food hygiene and safety	60 hours	3 hours	1 hour		65 hours	3	5	**(40%)**	**(60%)**
Subject 2: Introduction to documentary research	45 hours	3 hours			55h	2	4		
EU Discovery	**45 hours**	**1h30**	**1h30**		**5h**	**2**	**2**		
Scientific English	45 hours	1h30	1h30		5h	2	2	**(40%)**	**(60%)**
Cross-Cutting EU	**10:30 p.m.**	**1h30**			**2h30**	**1**	**1**		
UET: Entrepreneurial	10:30 p.m.	1h30			2h30	1	1	0%	100%
Total Semester 3	**375 hours**	**4:30 p.m.**	**2h30**	**6:00 a.m.**	**375 hours**	**17**	**30**		

4- Semester 4:

Field   : Biological Sciences
Sector   : SNV
Specialty   : Biochemistry

Internship in a company leading to a dissertation and a defense.

	VHS	Coefficient	Credits
Personal Work	450h	9	18
Internship in a company	175h	5	7
Seminars			
Other (End of cycle memory)	125h	3	5
Total Semester 4	**750**	**17**	**30**