PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

TRAINING OFFER
LMD

ACADEMIC LICENSE
2017 - 2018

Establishment	Faculty / Institute	Department
Mentouri Brothers University Constantine	Natural and Life Sciences	Biochemistry and Cellular and Molecular Biology

Domain	Sector	Speciality
Natural and Life Sciences	Biological Sciences	Cellular and Molecular Biology

الجمهورية الجزائرية الديمقراطية الشعبية

وزارة التعليم العالي و البحث العلمي

The Lord
.No. No

The Lord of the Rings

2018-2017

Allah	Al-Qaeda/Al-Qaeda	Al-Qaeda
الكيمياء الحيوية و البيولوجيا الخلوية و الجزيئية	علوم الطبيعة و الحياة	جامعة الإخوة منتوري قسنطينة

The	Allah	Allah
بيولوجيا خلوية و جزيئية	العلوم البيولوجية	علوم الطبيعة و الحياة

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I – License Identity Card

1 - Location of the training:

Faculty (or Institute): Natural and Life Sciences

Department : Biochemistry and Cellular and Molecular Biology

References of the license authorization order (attach a copy of the order)

2- External partners

- Other partner establishments: None

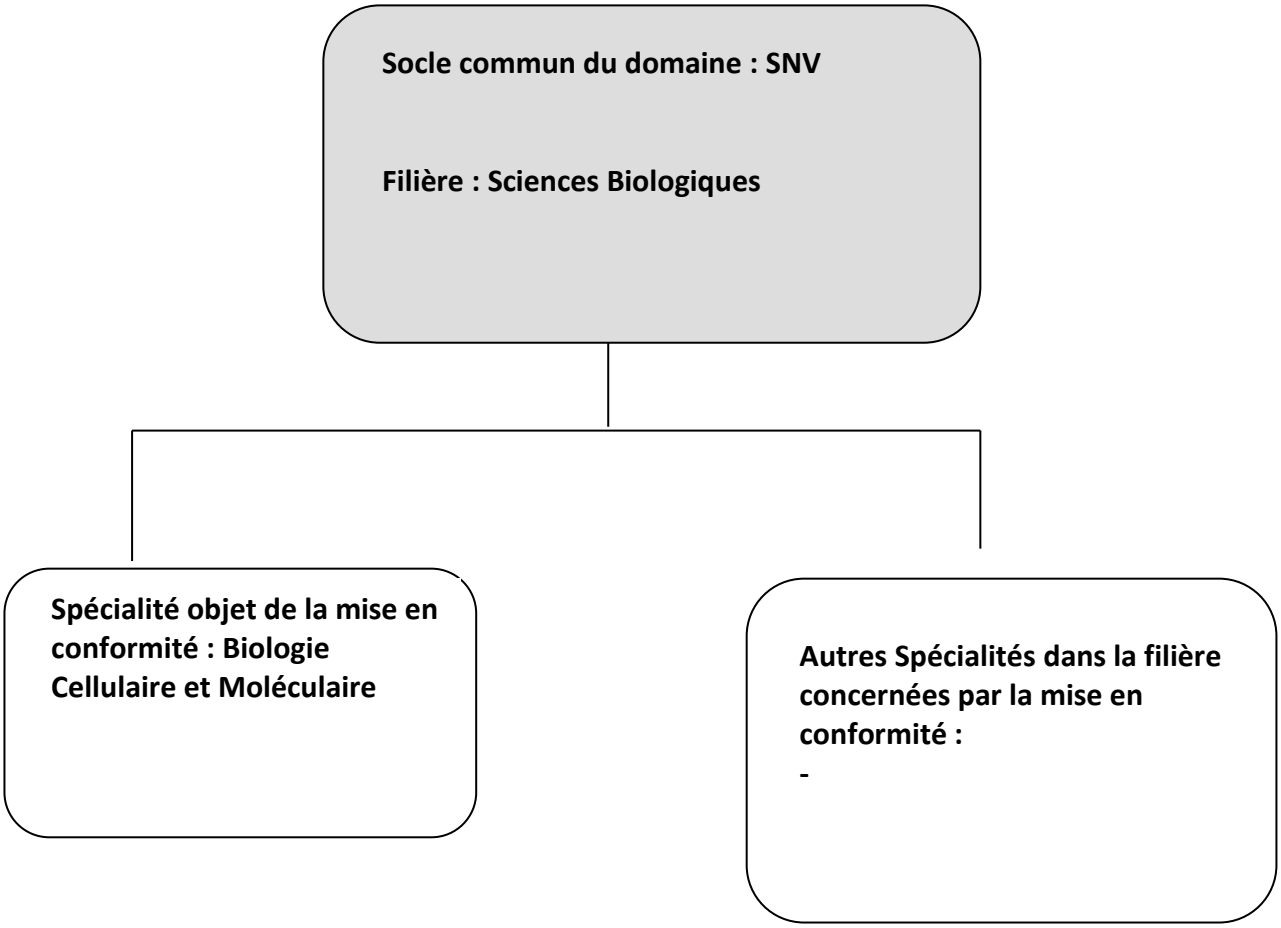
- Companies and other socio-economic partners : None

- International partners: None

3– Context and objectives of the training

A – General organization of the training: position of the project (Mandatory field)

If several licenses are offered or already supported at the establishment level (same training team or other training teams), indicate in the following diagram the position of this project in relation to the other courses.


Socle commun du domaine : SNV
Filière : Sciences Biologiques
Spécialité objet de la mise en conformité : Biologie Cellulaire et Moléculaire
Autres Spécialités dans la filière concernées par la mise en conformité :
-

B - Training objectives

Cell Biology is an essential discipline for understanding pathology.

It remains the basis of all progress in medicine, it allows us to understand pathological mechanisms , their origins and to design new drugs. This training offered in Cellular and Molecular Biology allows us to update the basic modern concepts necessary for understanding cellular and molecular mechanisms.

The goal of this training is to change the situation by allowing the student to play an active role thanks to the interactivity established by this system. This training prioritizes reasoning, logic and cognition at the expense of pure memory. It is an integrated and dynamic vision of cellular functioning that we want to give to students in the hope that this training in the immense disciplinary field that currently constitutes cellular biology.

C – Targeted areas of activity

- Master – Doctorate - Research in Cell Biology, Molecular Biology, Genetics, Immunology, Physiology, Biochemistry.
- Professional activities in specialized sectors.
- Biotechnology.

D – Regional and national employability potential

This license allows in particular:

- A continuation of specialized studies essentially in cellular and molecular biology or in biological disciplines requiring a molecular approach .
- It provides a definite advantage to students wishing to consider a career in the field of fundamental, biomedical research, or in the industrial sector.
- Integration into the professional world at the higher technician level via public research organizations (Biotechnology Center, Universities , hospital laboratories, expert laboratories, etc.) or through recruitment by industries.

- Access to a career in middle or secondary education or even in the field of vocational training .
- Access to the profession of science journalist

E – Gateways to other specialties

Degree in Immunology, Degree in Genetics.

F – Project monitoring indicators

In our opinion, the project monitoring indicators are located at two essential levels:

1- The student completion rate assessed by the number of diplomas awarded at the end of the training

2- The rate of professional integration of graduates in different economic sectors

5 – Available human resources

A: Supervision capacity (expressed in number of students that can be supported):

30 students.

B: Training management team:

B-1: Internal Management:

First and last name	Diploma	Grade	Research laboratory	Type of intervention	Signature
ROUABAH Leila	State doctorate	Professor	Cellular and Molecular Biology	Course	
ROUABAH Abdelkader	State doctorate	Professor	Cellular and Molecular Biology	Course	
TEBBANI Fethi	Doctorate in Science	MCB	Cellular and Molecular Biology	Courses, tutorials, practical work	
BELLIR Nousseiba	Doctorate in Science	MCB	Cellular and Molecular Biology	Courses, tutorials, practical work	

REZGOUNE Med Larbi	Doctorate in Science	MCB		Course	
KASSA LAOUAR Mounia	Master	MAA		Courses, practical work	
OUNIS Leila	3rd cycle doctorate LMD	MCB	Cellular and Molecular Biology	Courses, tutorials, practical work	
DAOUDI Hadjer	3rd cycle doctorate LMD	MCB	Cellular and Molecular Biology	Courses, tutorials, practical work	
DAHMANI Dahbia Ines	3rd cycle doctorate LMD	MAB	Cellular and Molecular Biology	Courses, tutorials, practical work	
BELAOUED Mohamed	3rd cycle doctorate LMD	MCB		Courses, practical work	
DJOUDI Brahim	3rd cycle doctorate LMD	MCB		Courses, practical work	
MOUSSAOUI Samira	3rd cycle doctorate LMD	MCB		Courses, practical work	

B-2: External Supervision:

First and last name	Diploma	Establishment of attachment	Type of intervention *	Signing in

B-3: Overall summary of human resources mobilized for the specialty (L3):

Grade	Internal Staff	External Staff	Total
Teachers	02	-	02
Lecturers (A)	-	-	-
Lecturers (B)	08	-	08
Assistant Professor (A)	01	-	01
Assistant Professor (B)	01	-	01
Other (specify)	-	-	-

Total	**12**	**00**	**12**

(*) Technical and support staff

B-4: Permanent support staff (indicate the different categories)

Grade	Effective
Laboratory engineer	04
Senior Technicians	04

6 – Material resources available

A- Educational Laboratories and Equipment: Sheet of existing educational equipment for the practical work of the planned training (1 sheet per laboratory)

Laboratory name: Biochemistry Laboratory DRC

Student capacity: 75 students

No.	Equipment name	Number	observations
1	UV/VIS spectrophotometer brand PERKIN	**02**	Functional
2	Magnetic heating stirrer	**04**	Functional
3	Bain-marie	**02**	Functional
4	Precision 0,001 gbalance / 0.1 g scale	**03** **02**	Functional Functional
5	Fixed pH meter	**06**	Functional
6	Projection device (DATA-SHOW)	**02**	Functional
7	TLC plates and accessories	**Yes**	
8	Vortex VELP	**01**	Functional
9	turax homogenizer	**01**	Functional

Laboratory title: Animal Biology Laboratory
Student capacity: 16 students

No.	Equipment name	Number	observations
1	Spectrophotometer	**01**	Non-Functional
2	Magnetic heating stirrer	**01**	Functional
3	Bain-marie	**01**	Functional
4	Balance	**01**	Functional
5	Fixed pH meter	**01**	Functional
6	Centrifuge	**01**	Functional
7	Non-heating magnetic stirrer	**01**	Functional
8	Vortex VELP	**01**	Functional
9	Distiller	**01**	Functional
10	Hood	**01**	Functional
11	Optech microscope	**02**	Functional
12	HM-LUX Microscope	**07**	Functional
13	wezlar microscope	**04**	Non-Functional
14	LETIZ transformer	**06**	Functional
15	Dissection tank	**05**	
16	Dissection kit	**06**	
17	Dissecting bell	**01**	
18	turax homogenizer	**01**	Functional

Laboratory title: Animal Physiology Laboratory
Student capacity: 16 students

No.	Equipment name	Number	observations
1	Spectrophotometer	**01**	Functional
2	Magnetic heating stirrer	**01**	Functional
3	Bain-marie	**01**	Functional
4	Balance	**01**	N. Functional
5	pH meter	**01**	Functional
6	Micro-Centrifuge	**01**	Functional
7	Non-heating magnetic stirrer	**01**	Functional

8	Vortex	**01**	Functional
9	Histological platinum	**01**	Functional
10	Extractor hood	**01**	N. Functional
11	Optech microscope	**07**	Functional
12	Dounce Crusher	**01**	Functional
13	Fabric micro- boyer	**01**	Functional
14	Filtration system	**01**	Functional
15	Stereo microscope	**04**	Functional
16	Dissection kit	**10**	
17	Dissecting bell	**01**	
18	turax homogenizer	**01**	N.Functional

B- Internship and in-company training sites:

Visits to companies from different economic sectors will be organized as a complement to educational training and immersion in the world of work.

Internship location	Number of students	Duration of the internship
Nothing	-	-

C- Available documentation (*in relation to the training offered)* :

We have 2 libraries:

- A central resource with more than 3,000 book titles directly related to the specialty offered.
- One at the level of la Faculté SNVwith more than 400 titles of works directly related to the proposed specialty.

D- Personal work spaces and ICT

Our university has made available **3 large Internet spaces** where students can access scientific documentation *online* :

- A space with **50 places** on the ground floor of the Bt rooms reserved for students of all courses.
- A 30-seat space **at the central library level** reserved for students of all courses.

- A space with **20 places at the SNV Faculty** .
- A room with **20 seats** is reserved to the **teaching of Bioinformatics** .

II – Half-yearly organization sheet for specialty courses (S5 and S6)

(include the annexes of the decrees of the common bases of the field and the sector)

Common core in the field of "Natural and Life Sciences"

Semester 1

Teaching units	Matter		Credits	Coefficients	Hourly volume weekly			VHS (15 weeks)	Other*	Assessment method			
	Code	Titled			Course	TD	TP			CC*		Exam	
Fundamental EU Code: UEF 1.1 Credits: 18 Coefficients: 9	F 1.1.1	General and organic chemistry	6	3	1h30	1h30	1h30	67h30	82h30	x	40%	x	60%
	F 1.1.2	Cell biology	8	4	1h30	1h30	3:00 a.m.	90h00	110:00 a.m.	x	40%	x	60%
	F 1.1.3	Mathematical Statistics	4	2	1h30	1h30	-	45h00	55h00	x	40%	x	60%
EU Methodology Code: UEM 1.1 Credits: 9 Coefficients: 5	M 1.1.1	Geology	5	3	1h30	1h30	1 hour	60h00	65h00	x	40%	x	60%
	M 1.1.2	Communication and Expression Techniques 1 (in French)	4	2	1h30	1h30	-	45h00	55h00	x	40%	x	60%
EU Discovery Code: UED 1.1 Credits: 2 Coefficients: 2	D 1.1.1	Working Method and Terminology 1	2	2	1h30	1h30		45h00	5:00 a.m.	x	40%	x	60%
Transversal EU Code: UET 1.1 Credits: 1 Coefficients: 1	T 1.1.1	Universal History of Biological Sciences	1	1	1h30	-	-	10:30 p.m.	2h30	-	-	x	100
Total Semester 1			30	17	10:30 a.m.	9:00 a.m.	5:30 a.m.	375 hours	375 hours				

Other* = Additional work in half-yearly consultation; CC* = Continuous assessment

Common core in the field of "Natural and Life Sciences"

Semester 2

Units teaching	Materials		Credits	Coefficients	Hourly volume weekly			VHS	Other*	Assessment method			
	Code	Titled			Course	TD	TP			CC*		Exam	
Fundamental EU Code: UEF 2.1 Credits: 18 Coefficients: 9	F 2.1.1	Thermodynamics and solution chemistry	6	3	1h30	1h30	1h30	67h30	82h30	x	40%	x	60%
	F 2.1.2	Plant Biology	6	3	1h30	-	3:00 a.m.	67h30	82h30	x	40%	x	60%
	F 2.1.3	Animal Biology	6	3	1h30	-	3:00 a.m.	67h30	82h30	x	40%	x	60%
EU Methodology Code: UEM 2.1 Credits: 9 Coefficients: 5	M 2.1.1	Physical	5	3	1h30	1h30	1 hour	60h00	65h00	x	40%	x	60%
	M 2.1.2	Communication and Expression Techniques 2 (in English)	4	2	1h30	1h30	-	45h00	55h00	x	40%	x	60%
EU Discovery Code: UED 2.1 Credits: 2 Coefficients: 2	D 2.1.1	Life sciences and socio-economic impacts	2	2	1h30	1h30	-	45h00	5:00 a.m.	x	40%	x	60%
Transversal EU Code: UET 2.1 Credits: 1 Coefficients: 1	T 2.1.1	Working Method and Terminology 2	1	1	1h30	-	-	10:30 p.m.	2h30	-	-	x	100%

Total Semester 2	**30**	**17**	**10:30 a.m.**	**6:00 a.m.**	**8:30 a.m.**	**375 hours**	**375 hours**

Other* = Additional work in half-yearly consultation; CC* = Continuous assessment

Common core in the field of "Natural and Life Sciences"
"Biological Sciences" stream

Semester 3

Teaching units	Materials	Credits	Coefficients	Hourly volume weekly			VHS (15 weeks)	Other*	Assessment method			
	Titled			Course	TD	TP			CC*		Exam	
Fundamental EU Code: UEF 2.1.1 Credits: 6 Coefficients: 3	**Zoology**	**6**	**3**	**3:00 a.m.**	**-**	**1h30**	**67h30**	**82h30**	**x**	**40%**	**x**	**60%**
Fundamental EU Code: UEF 2.1.2 Credits: 12 Coefficients: 6	**Biochemistry**	**6**	**3**	**3:00 a.m.**	**1h30**	**-**	**67h30**	**82h30**	**x**	**40%**	**x**	**60%**
	Genetic	**6**	**3**	**3:00 a.m.**	**1h30**	**-**	**67h30**	**82h30**	**x**	**40%**	**x**	**60%**
EU Methodology Code: UEM 2.1.1 Credits: 4 Coefficients: 2	**Communication and Expression Techniques (in English)**	**4**	**2**	**1h30**	**1h30**	**-**	**45h00**	**55h00**	**x**	**40%**	**x**	**60%**
EU Methodology Code: UEM 2.1.2 Credits: 5 Coefficients: 3	**Biophysics**	**5**	**3**	**1h30**	**1h30**	**1 hour**	**60h00**	**65h00**	**x**	**40%**	**x**	**60%**
EU Discovery Code: UED 2.1.1 Credits: 2 Coefficients: 2	**Environment and Sustainable Development**	**2**	**2**	**1h30**	**1h30**	**-**	**45h00**	**5:00 a.m.**	**x**	**40%**	**x**	**60%**
Transversal EU Code: UET 2.1.1 Credits: 1	**University Ethics and Professional Conduct**	**1**	**1**	**1h30**	**-**	**-**	**10:30 p.m.**	**2h30**	**-**	**-**	**x**	**100%**

Coefficients: 1												
Total Semester 3		**30**	**17**	**3:00 p.m.**	**7:30 a.m.**	**2h30**	**375 hours**	**375 hours**				

Other* = Additional work in half-yearly consultation; CC* = Continuous assessment

Common core in the field of "Natural and Scientific Sciences" "Biological Sciences" stream

Semester 4

Teaching units	Materials	Credits	Coefficients	Hourly volume weekly			VHS (15 weeks)	Other*	Assessment method			
	Titled			Course	TD	TP			CC*		Exam	
Fundamental EU Code: UEF 2.2.1 Credits: 8 Coefficients: 3	**Botanical**	**6**	**3**	**3:00 a.m.**	**-**	**1h30**	**67h30**	**82h30**	**x**	**40%**	**x**	**60%**
Fundamental EU Code: UEF 2.2.2 Credits: 14 Coefficients: 5	**Microbiology**	**8**	**4**	**3:00 a.m.**	**1h30**	**1h30**	**90h00**	**110:00 a.m.**	**x**	**40%**	**x**	**60%**
	Immunology	**4**	**2**	**1h30**	**1h30**	**-**	**45h00**	**55h00**	**x**	**40%**	**x**	**60%**
EU Methodology Code: UEM 2.2.1 Credits: 4 Coefficients: 2	**Scientific methodology and techniques for studying living things**	**4**	**2**	**1h30**	**-**	**1h30**	**45h00**	**55h00**	**x**	**40%**	**x**	**60%**
EU Methodology Code: UEM 2.2.2 Credits: 4 Coefficients: 2	**Biostatistics**	**5**	**3**	**1h30**	**1h30**	**1 hour**	**60h00**	**65h00**	**x**	**40%**	**x**	**60%**
EU Discovery Code: UED 2.2.1 Credits: 2 Coefficients: 2	**General ecology**	**2**	**2**	**1h30**	**1h30**	**-**	**45h00**	**5:00 a.m.**	**x**	**40%**	**x**	**60%**
Transversal EU Code: UET 2.2.1	**Computer Tools**	**1**	**1**	**1h30**	**-**	**-**	**10:30 p.m.**	**2h30**	**-**	**-**	**x**	**100%**

Credits: 1 Coefficients: 1												
Total Semester 4		**30**	**17**	**1:30 p.m.**	**6:00 a.m.**	**5:30 a.m.**	**375 hours**	**375 hours**				

Other* = Additional work in half-yearly consultation; CC* = Continuous assessment

Semester 5

Teaching Unit		VHS	VH weekly				Coefficient	Credits	Assessment method	
		14-16 Weeks	C	TD	TP	Others			Continuous (40%)	Exam (60%)
Fundamental EU	Cell Biology	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
	Cellular and Molecular Physiology	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
	Histology	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
Methodological EU	Biotechnology 1	45h00	1h30	1h30	-	55h00	**2**	**4**	X	X
	Bioinformatics 1	60h00	1h30	-	2h30	65h00	**3**	**5**	X	X
EU Discovery	Biostatistics 1	45h00	1h30	1h30	-	5:00 a.m.	**2**	**2**	X	X

Transversal EU	Scientific English 1	10:30 p.m.	1h30	-	-	2h30	**1**	**1**	X	X
Total Semester 5		**375 hours**	**10:30 a.m.**	**7:30 a.m.**	**7:00 a.m.**	**375 hours**	**17**	**30**	**X**	**X**

Semester 6

Teaching Unit		**VHS**	**VH weekly**				**Coefficient**	**Credits**	**Assessment method**	
		14-16 Weeks	**C**	**TD**	**TP**	**Others**			**Continuous (40%)**	**Exam (60%)**
Fundamental EU	Molecular Biology	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
	Applied Biochemistry	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
	Developmental biology	67:30	1h30	1h30	1h30	82h30	**3**	**6**	X	X
Methodological EU	Biotechnology 2	45h00	1h30	1h30	-	55h00	**2**	**4**	X	X
	Bioinformatics 2	60h00	1h30	-	2h30	65h00	**3**	**5**	X	X
EU Discovery	Biostatistics 2	45h00	1h30	1h30	-	5:00 a.m.	**2**	**2**	X	X

Transversal EU	Scientific English 2	10:30 p.m.	1h30	-	-	2h30	**1**	**1**	X	X
Total Semester 6		**375 hours**	**10:30 a.m.**	**7:30 a.m.**	**7:00 a.m.**	**375 hours**	**17**	**30**	**X**	**X**

7- Overall summary of the training : (indicate the separate global VH in progress, TD, for the 06 semesters of teaching, for the different types of UE)

EU / VH	UEF	EMU	UED	UET	Total
Course	517H30	270H	135H	135H	**1057H30**
TD	315H	8:30 p.m.	135H	-	**652H30**
TP	382H30	157H30	-	-	**540H**
Personal work	-	-	-	-	-
Other (specify)	1485H	720H	30H	3 p.m.	**2250H**
Total	2700H	1350H	300H	150H	**4500H**
Credits	108	54	12	6	**180**
% in credits for each EU	60%	30%	6.67%	3.33%	**100%**

III - Detailed program by subject for semesters S5 and S6

(1 detailed sheet per subject)

(all fields are mandatory)

Degree title: Cellular and Molecular Biology
Semester : 5

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Cell Biology

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. ABED N.**

Cell Biology Program

- Reminders (cell organelles)
- The plasma membrane
- Membrane proteins
- The Cell Coat
- The cell cycle
- Cell differentiation
- The extracellular matrix
- Oncogenesis
- Apoptosis

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semester : 5

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Cellular and Molecular Physiology

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. DAOUDI H.**

Cellular and Molecular Physiology Program

- Introduction to Cell Physiology (Reminders)
- Biomembranes
- Receivers and reception
- Cell adhesion
- Intercellular junctions
- Cell motility
- Cell contractility

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semester : 5

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Histology

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. OUNIS L.**

Histology Program

- Lining epithelium
- Glandular epithelium
- Connective tissue
- Cartilage tissue
- Bone tissue
- Muscle tissue:
    - Skeletal
    - Smooth
    - Cardiac
- Nervous tissue

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semesters : 5 and 6

EMU : Methodological Teaching Unit

Responsible teacher of the UEM: Pr. ROUABAH A.

Subject: Biotechnology 1 and 2

VHG: 45H00 , Course: 22H30; Tutorial: 22H30, Others: 55H00
Credits: 04 Coefficient: 02

Teacher responsible for the subject : **Responsible: Pr. ROUABAH A.**

Biotechnology Program

- Interest of biotechnology in the modern world
- Concept of genetics
- Interest in genetic engineering
- Biological engineering

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semesters : 5 and 6

UED : Discovery Teaching Unit

Teacher responsible for the UED: Dr. DJOUDI B.

Subject: Biostatistics 1 and 2

VHG: 45H00 , Course: 22H30; Tutorial: 22H30; Others: 5H00
Credits: 02 Coefficient: 02

Teacher responsible for the subject : **Responsible: Dr. DJOUDI B.**

Biostatistics Program

Reminders: probability laws (Binomial, Normal, chi2 law, Student , Fischer)

- Study of linear models
- Analysis of variance
- Simple and multiple linear regression
- Step regression and polynomial regression
- Variable transformation

- Multidimensional Data Analysis
  (ACP, AFC, Discriminant Analysis, Canonical Correlation Analysis)
- Classification
- Similarity matrix
- Distance matrix
- Dendrogram
- Concept of modeling

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semesters : 5 and 6

EMU : Methodological Teaching Unit

Responsible teacher of the UEM: Pr. ROUABAH A.

Subject: Bioinformatics 1 and 2

VHG: 60H00 , Course: 22H30; Practical work: 37H30; Others: 65H00
Credits: 05 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. BELAOUED M.**

Bioinformatics Program

Semester 1:

Course :

- Introduction to Computer Science
- The computer and how it works
- Windows operating system and how it works
- The Internet network
- Databases in computing

TP:

- Introduction to Microsoft Word and how it works
- Introduction to Microsoft Excel and applications to Biostatistics

Semester 2:

Course :

- Introduction to Bioinformatics
- Introduction to biological databases
- Tools for querying biological databases
- The composition of biological sequences

TP:

- Access and search in biological databases
- Querying biological data banks
- Introduction to the use of biological sequence comparison tools

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semesters : 5 and 6

UET : Cross-Curricular Teaching Unit

UET Responsible Teacher: Dr. DJOUDI B.

Subject: English Scientist

VHG: 10:30 p.m. , Classes: 10:30 p.m., Others: 2:30 a.m.
Credits: 01 Coefficient: 01

Teacher responsible for the subject : **Responsible: Dr. DJOUDI B.**

English Program Scientist

- Oral communication training.
- Study of research articles in biology:
  - Structure of specialized articles
  - Study of the amphibology of complex names
  - Study of grammar and vocabulary in context

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semester : 6

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Molecular Biology

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. OUNIS L.**

Molecular Biology Programs

Chapter 1: Structure of Nucleic Acids

Chapter 2: DNA Replication in Eukaryotes

Chapter 3: Transmission in Prokaryotes and Eukaryotes

The genetic code and its characteristics

Translation in prokaryotes and eukaryotes

Chapter 4: Regulation of Gene Expression

Lactose operon, Tryptophan

Seminars

- DNA extraction
- PCR and real-time PCR
- Southern blot
- Western blot
- Cloning : restriction enzyme

  Plasmids and vectors
- DNA sequencing
- DHLPC
- DNA chips
- Therapy
- Prenatal diagnosis…

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semester : 6

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Developmental Biology

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Dr. TEBBANI F.**

Developmental Biology Programs

Part 1: Basic Elements

1- Introduction

2- Stages of development

3- Essential molecular components

4- Developmental genetics

Part 2: Main model organisms

1- Model organisms

2- Elegant Caenorhabditis

3- Xenope

4- Drosophila

Degree title: CELLULAR AND MOLECULAR BIOLOGY
Semester : 6

UEF : Basic Teaching Unit

UEF Responsible Teacher: Prof. ROUABAH L.

Subject: Applied Biochemistry

VHG: 67H30 , Course: 22H30; Tutorial: 22H30; Practical: 22H30, Other: 82h30
Credits: 06 Coefficient: 03

Teacher responsible for the subject : **Responsible: Ms. KASSA LAOUAR Mr.**

Applied Biochemistry Programs

1- Pathophysiology of metabolic diseases: Biochemical aspects
2- Compartment marker enzymes
3- Structural proteins and genetic diseases
4- Medical diagnostic enzymes
5- Oxygen transport proteins

V- Agreements / Conventions

STANDARD LETTER OF INTENT

(In case of a license co-sponsored by another university establishment)

(Official paper on the letterhead of the university establishment concerned)

Subject: Approval of co-sponsorship of the license entitled:

university center) hereby declares to co-sponsor the above-mentioned license for the entire period of authorization of the license.

To this end, the university (or university center) will assist this project by:

- Giving his point of view in the development and updating of teaching programs,
- Participant in seminars organized for this purpose,
- By participating in the defense juries,
- By working to pool human and material resources.

SIGNATURE of the legally authorized person:

FUNCTION :

Date :

STANDARD LETTER OF INTENT

(In case of license in collaboration with a company in the user sector)

(Official company letterhead)

SUBJECT: Approval of the project to launch a Bachelor's degree course entitled:

Provided to:

The company hereby declares its willingness to show its support for this training as a potential user of the product.

To this end, we confirm our support for this project and our role will consist of:

- Give our point of view in the development and updating of teaching programs,
- Participate in seminars organized for this purpose,
- Participate in defense juries,
- Facilitate as much as possible the reception of interns either in the context of final-year dissertations or in the context of supervised projects.

The means necessary to carry out the tasks incumbent upon us to achieve these objectives will be implemented on a material and human level.

Mr (or Mrs)* ……is designated as external coordinator of this project.

SIGNATURE of the legally authorized person:

FUNCTION :

Date :

OFFICIAL STAMP or COMPANY SEAL

VI – Brief CV
From the teaching team mobilized for the specialty
(Internal and external)
(according to the attached model)

RESUME

First and last name : **TEBBANI Fethi**
Email: fethitebbani@gmail.com
Tel: 0662.21.38.57

Degree and date of award: **Doctorate in Science in 2017**

Master's degree in BMC in 2010

Veterinarian in 1994

Baccalaureate in 1987

Specialty: **Molecular and cellular biology**

Grade: **Lecturer**

Position: **Teacher-researcher**

Attached establishment: **Mentouri Brothers University Constantine**

Scientific areas of interest: **Biology and health**

Latest publications and scientific activities:

- **Article:** Descriptive approach for sickle cell disease in Eastern of Algeria, Int. J. Pharm. Sci. Rev. Res., 25(1), Mar – Apr 2014; Article No. 15, Pages: 97-101
- **Article:** Introduction to MRI in canine medicine , science and technology review, Mentouri University, Constantine, no. 31, June 2010
- Communication 11th International Cancer Days (Childhood and Adolescent Cancer) – Constantine October 9-11, 2015
- International Biotechnology Seminar - Constantine October 19-21, 2015
- Communication 3rd national days of biology and molecular genetics (1st Maghreb meeting) - Constantine 05-06 November 2014
- Communication 9th International Cancer Days (supportive care and accompaniment in oncology) – Constantine October 11-13, 2013
- Communication 31st scientific days of the BENBADIS Constantine University Hospital - May 23 and 24, 2012
- Communication 2nd National Congress of Medical Oncology – Algiers April 7, 2012
- Communication 7th International Cancer Days of Constantine – October 14-16, 2011
- Communication 3rd International Seminar on Animal Biology – Constantine May 9-11, 2011
- Communication 2nd Auressian Medical Days – Batna December 2-4 , 2011

VII - Opinions and Visas of the Administrative and Consultative Bodies

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- Titled of the License : Cellular and Molecular Biology

25 FEV 2018

VII – Notice and Visa of the Regional Conference (Only in the final version sent to the MESRS)

VIII – Opinion and Visa of the National Educational Committee of the Domain
(Only in the final version sent to the MESRS)