جامعة الزقازيق
كلية الطب البيطري
وحدة ضمان الجودة

Zagazig University
Faculty of Veterinary Medicine
The Quality Assurance Unit
وحدة ضمان الجودة بكلية الطب البيطرى-جامعة الزقازيق

Programme Specification

Bachelor of veterinary medicine (BVM)

(Credit hours)

(2022-2023)

Faculty Council approval date 12/ 9 /2022

The current bylaw is issued by the ministerial decree no. 1410 on 27/4/2022.

Programme Specification (2022-2023)

Zagazig University **Faculty of Veterinary Medicine**

Programme specification (credit hours)

A. Basic information

1- Programme Title: Bachelor of Veterinary Medical Sciences (BVMSc)

2- Programme type: Single

3- Faculty Departments:

1. Anatomy and Embryology
2. Histology
3. Biochemistry
4. Physiology
5. Animal Wealth Development
6. Veterinary Public Health
7. Behavior, Management of animal, Poultry and Aquatics
8. Pathology
9. Bacteriology, Mycology and Immunology
10. Nutrition and Clinical Nutrition
11. Pharmacology
12. Parasitology
13. Virology
14. Theriogenology
15. Surgery, Anesthesia and Radiology
16. Animal Medicine
17. Aquatic Animal Medicine
18. Clinical Pathology
19. Food Control
20. Forensic Medicine and Toxicology
21. Avian and Rabbit Medicine
22. Zoonoses

***** *The higher academic administration of the college headed by the dean of the college nominates a faculty member responsible for teaching and of Human rights and combating corruption.*

4- External Institutions

1. ELP Centre of Zagazig University "English Language and Terminology" (111 - أ ن ج)
2. Faculty of Science:
   - Department of Zoology “Biology” (112- ب ي و).

- Department of Physics "Biophysics" (ف ي ح -113)
- Department of Chemistry "Chemistry" (ك ي م -117)

5- Coordinator

Prof. Dr. Mohamed El-Sayed Mohamed (**Vice Dean for Education and Student Affairs**).

6- External evaluator

The external evaluator Committee nominated by the quality assurance center and department councils according to each specialty.

7- Last date of programme specification approval: (Faculty council approval 8/8/2022**).**

7.1- The current bylaw is issued by the ministerial decree no. 1410 on 27/4/2022.

7.2- Since the establishment of an internal quality system in the faculty, National Academic Reference Standards (NARS, 2009) have been adopted. The first adoption took place on 12/4/2010, and then in 2019, all academic departments confirmed their continued adoption of the national standards, whose executive decisions were approved by the Education and Student Affairs Committee on 3/4/2019 and the College Board on 8/4/2019.

After the issuance of the new regulation for the Bachelor of Veterinary Medicine with the credit hours system, a compatibility study was conducted to ensure that these regulations comply with NARS on 06/ 07/ 2022, which was approved by the faculty council on 17/7/2022.

B. Professional Information

1 - Programme aims

- **Preparing veterinarians who are able upon graduation to:**

1. Respond to the basic needs of society and get ready to potential changes, whether regional or global.
2. Establish and manage private veterinary projects without relying on government work.
3. Practice work and tasks of veterinary medicine in Arab and African countries.
4. Develop scientific research to reach to the highest animal productivity with good health and disease prevention.
5. Develop the diagnostic means of animals, birds and fish diseases, predict incoming diseases and detect contaminants in foods of animal origin.

- **The program qualifies Faculty graduates to work in the following fields:**

1. Livestock management and development .
2. Diagnosis and treatment of diseases of animals, birds and fish .
3. Preventive veterinary medicine
4. Public health and human protection from diseases and harmful residues transmitted to him from Animal, animal products and waste.
5. Health control and food safety of animal origin .
6. Protection of the environment and wildlife .
7. Veterinary pharmaceutical industry and pharmaceutical marketing .
8. Animal products industry and waste recycling .
9. Specialized veterinary consultations and feasibility studies for livestock projects.

2 - Intended learning Outcomes (ILOs)

a - <u>Knowledge and Understanding</u>

The Zagazig Veterinary Medicine graduates should be able to:

a.1- Distinguish English language and terminology in veterinary medicine and related fields.

a.2- Recognize molecular, ultra-structural, clinical, biochemical and cellular mechanisms important in maintaining the body's homeostasis of different animals.

a.3- Describe macroscopic and microscopic structure of normal tissue and organs of various animals, birds and fish.

a.4- Identify function of the animal, bird, fish body and their organ systems.

a.5- Recognize the embryological development, causes of teratogenesis, and types of malformation.

a.6- Attain basics of biology, biophysics, chemistry, biochemistry and biotechnology and their applications in veterinary fields.

a.7- Identify veterinary genetic principles, theories and their filed applications.

a.8- Acquire complementary sciences for biostatistics, computer skills, software design and bioinformatics applications related to animal farm management and animal rights.

a.9- Recognize normal animal behavior at different animal situations and conditions.

a.10- Acquire principles of adequate nutrition, normal feeding patterns and metabolic disorders.

a.11- Identify common animal breeds within their localities, acquire principles of economic feasibility study writing for livestock projects, business administration, and be able to manage farms and veterinary facilities with the ability to crisis and risk management

a.12- Recognize normal and abnormal reproductive animal behavior.
a.13- Recognize influence of stress and other issues on animal production and health.
a.14- Estimate the economic impact and factors on the delivery of veterinary health care as well as improvement of animal production (genetic lines and artificial insemination).
a.15- Estimate the value of the scientific methods in establishing the causation of disease and efficacy of traditional and nontraditional therapies.
a.16- Identify the scientific principals underlying laboratory diagnosis and the ability to critically evaluate the limitations of diagnostic methodologies.
a.17- Recognize various macro and microscopical causes (genetic developmental, metabolic, toxic, microbiologic, parasitic, autoimmune, neoplastic, degenerative and traumatic) of disorders and the ways in which they operate on the body (Pathogenesis).
a.18- Describe the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
a.19- Identify principles of pharmacology, Veterinary medications, therapeutic decision making and pharmaceutical marketing.
a.20- Name the ideal and permissible parameters (physical, chemicals, and drug residues as well as microbial) of milk, dairy products, eggs, oils meat and meat products.
a.21- Recognize how to detect the adulteration of milk, meat and their products.
a.22- Depict the etiology, source, reservoir, mode of transmission and control of animal and zoonotic diseases.
a.23- Identify the basics of judgment of meat, fish and poultry carcasses and their products and knowledge of statutory requirements for animal transport, slaughterhouses and storage of meat and its products.
a.24- Recognize avian, rabbit and fish diseases and their prophylactic and control measures.
a.25- Recognize the management and prevention strategy decisions against veterinary diseases.
a.26- Identify the animal health maintenance applications.
a.27- Recognize the epidemiological triangle of diseases and accurate measurements of Veterinary quarantine.
a.28- Identify permissible limits of pollutants in water, feed and air & soil contents.
a.29- Portray the application of disinfectants in different situations (self, labs, farms..... etc.).
a.30- Identify basics of forensic medicine and toxicology in addition to different sources, types of toxic agents, how to detect them and treat their effects.

a.31- Recognize principles of anesthesia, surgical and theriogenological operations beside diagnostic imaging of different animal species.

a.32- Identify the laws and ethical codes relevant to animal and food hygiene (meat and milk products), and the safety of food facilities.

a.33- Recognize appropriate euthanasia of animals, ensuring personal and environmental safety as well as carcass disposal.

a.34- Identify principles of control of emerging and exotic animal, poultry and fish diseases.

a.35- Recognize the basics of communication skills, the optimal use of human resources, and the protection of human and animal rights.

a.36- Recognize the history of veterinary medicine and the importance of livestock in the Arab world, master the mechanism of veterinary extension and media, and publish all that is new in veterinary sciences.

b - Intellectual skills

The Zagazig Veterinary Medicine graduates must be able to:

b.1- Identify the important clinical questions stemming from a case interaction.

b.2- Compare and critique based on an understanding of available data as macro and microscopical picture of different body organs, animal nutritional problems and medication for different problems.

b.3- Evaluate scientific as well as clinical information and critically analyze conflicting data and hypotheses.

b.4- Locate from different choices in handling, preventing and treatment of different veterinary problems.

b.5- Conclude and discuss the scientific approach to find solutions for the veterinary problems and interpret the laboratory test results.

b.6- Practice continuing learning and self-evaluation.

b.7- Specify problems and find solution in different veterinary sciences.

b.8- Locate the appropriate procedures for treatment and control of animal diseases.

b.9- Utilize the knowledge of evidence based veterinary medicine in making decisions.

c - Professional and practical skills

The Zagazig Veterinary Medicine graduates must be able to:

c.1- Secure and handle animals in a safe and human manner with maintenance the animal welfare.

c.2- Isolate and identify the etiological agents of diseases (bacteria, viruses, parasites, nutritional, toxic, metabolic ..... etc.).

c.3- Carryout clinical and pathobiological (pathological, clinical pathological and clinical biochemistry) examination of diseased animals.

c.4- Diagnose different diseases among various animal species.

c.5- Write a ration formula according to the health status and genetic line of animals.
c.6- Apply anesthesia for common surgical and theriogenological procedures efficiently and implement appropriate after care.
c.7- Perform a post-mortem examination appropriate to the species involved.
c.8- Apply surgical and theriogenological procedures.
c.9 – Obtain the history of different animal cases.
c.10- Implement procedures related to public health issues, notifiable diseases and disposal of animal wastes.
c.11- Apply specific treatment for the diagnosed cases, write a prescription and the ability of good pharmaceutical marketing.
c.12- Recognize and outline initial treatment as well as emergency care for sick animals with life threatening condition and pain management.
c.13- Utilize appropriate safety procedures to protect clients, co-workers and self.
c.14- Carryout feasibility studies as well as bioinformatics, software design and biotechnology for animal production projects.
c.15- Inspect meat, milk and their products to decide their fitness to human consumption with issuing a report.
c.16- Apply preventive measures in veterinary premises and fields with crisis and risk management.
c.17- Perform diagnostic imaging techniques safely.
c.18- Apply proper animal euthanasia in humane and safe manner.
c.19- Deal professionally with animal, poultry and fish farm management.
c.20- Examine different animal tissues macro and microscopically.
c.21- Carryout suitable procedure of vaccination in different animal species.
c.22- Carryout a scientific experiment and test professionally with the publication of everything new to develop the history of veterinary medicine at the local, regional and the international levels.
c.23- Develop a plan to deal with diverse human patterns while dealing with them and respect their rights.

d - <u>General and transferable skills</u>

The Zagazig Veterinary Medicine graduates must be able to:

d.1- Impress team work to achieve a specific task.
d.2- Communicate successfully among students and animal owners by various means.
d.3- Perform a specified task in research on common disease problems in the surrounding domestic and wild animals in Sharkia province.
d.4- Demonstrate knowledge of the organization and management of veterinary practices and record keeping.

d.5- Utilize the acquired knowledge and skills to work under pressure for control of emerging diseases.

d.6- Interpret, transcribe and communicate data and observation (e.g. medical legal report).

d.7- Use media to help promote the veterinary history and extension as well as pharmaceutical marketing.

3-Academic standards

3.1- External references for standard:

The national academic reference standards (NARS) of veterinary medicine issued by national authority of quality assurance and accreditation for education (NAQAAE) were adopted by the faculty council 12/4/2010. The academic departments confirmed their continued adoption of NARS Feb. 2009 through their departmental councils, whose executive decisions were approved by the Education and Student Affairs Committee on 3/4/2019 and the College Board on 8/4/2019.

3.2- Comparison of provision to external references:

3.2.1- Comparing the NARS with Bachelor of Veterinary Medical Sciences (BVMSc) programme ILOS

Knowledge and understanding	
NARS	**BVMSc Programme ILOS**
1	a 1, 2, 6, 7, 8
2	a 8, 9, 11, 12, 14, 25, 36
3	a 3
4	a 2, 4
5	a 13, 26, 36
6	a 10,17
7	a 15,16, 17, 18, 22
8	a 15, 19, 20
9	a 25, 27
10	a 5, 17, 30, 31, 35
11	a 15, 16, 17, 18, 22, 24, 26, 27, 33, 34
12	a 27, 36
13	a 20, 21, 22, 23, 29, 32
14	a 26, 32
15	a 35, 36
Intellectual Skills	
NARS	**BVMSc Programme ILOS**
1	b 1, 3

2	b 2
3	b 4, 5, 7
4	b 8, 9
5	b 1, 6
Professional and practical skills	
NARS	**BVMSc Programme ILOS**
1	c 1 to 23
2	c 1, 18
3	c 9
4	c 3
5	c 12, c 22
6	c 15
7	c 5, 19
8	c 11, 12
9	c 2, 4
10	c 11, 12
11	c 13, 23
12	c 10, 15, 16
13	c 13
General and transferable Skills	
NARS	**BVMSc Programme ILOS**
1	d 5
2	d 1
3	d 2, 6
4	d 4
5	d 3
6	d 7

3.2.2- Comparing the NARS with Bachelor of Veterinary Medical Sciences (BVMSc) programme structure

Total Credit hours:

Compulsory courses: 186 credit hours

Elective courses: 6 credit hours

Training: One academic year

Items	Lectures	Practical	Training	Total core	Elective	Total core + elective
Credit	122	64	-	186	6	192
Contact hours	1830	1920	1080	4830	105	4935

- **Basic sciences:**

Science	Number of Credit hours/week
Biophysics	2
Biology (zoology)	2
Chemistry – Basic biochemistry – Biochemistry and molecular biology – Metabolism and body fluids	10
Biostatistics and computer*	3-1=2
Animal, poultry, aquatic animal behavior and management (A-B)	6
Anatomy and embryology (A-B-C)	9
Histology (A-B)	6
Physiology (A-B-C)	8
Breeding and production of animals, poultry and fish	6
Total	**51**

***Biostatistics and computer serve basic and computer and ICDL Basic sciences= 51 credit hours representing 990 contact hours

Percentage of basic sciences according to contact hours: 20.06 %

- **Pre-clinical sciences:**

Science	Number of credit hours
Veterinary genetics and genetic engineering	4
Microbiology (general- special)	6
Immunology	2
Virology (A-B)	6
Pharmacology (general-special)	6
Parasitology (A-B)	6
Pathology (General- special)	6
Nutrition and clinical nutrition (A-B)	6
Milk and milk products hygiene and technology(A-B)	6
Meat and meat products hygiene and technology (A-B)	6
Total	**54**

Pre-clinical sciences= 54 credit hours representing 1095 contact hours

Percentage of pre-clinical sciences according to contact hours:22.19 %

- **Clinical sciences:**

Science	Number of hours
Internal medicine (General, special(A-B)	9
Infectious diseases (A-B)	6
Forensic medicine and veterinary medical ethics – Toxicology	6
Pathology (Morbid anatomy)	3
Avian and rabbit medicine (A-B)	6
Aquatic animal medicine (A-B)	6
Animal, poultry, Fish and environmental hygiene (A-B)	8
General Surgery, Anesthesiology and Radiology A- Special Surgery (A-B)	9
Zoonoses (A-B)	5
Gynecology of farm and pet animals- Obstetric of farm and pet animals- Andrology and artificial insemination	9
Clinical pathology (A-B)	6
Total	**73**

Clinical sciences= 73 credit hours representing 1470 contact hours

Percentage of clinical sciences according to contact hours: 29.79 %

* *Minstrel decree No. 1410 on 27-4-2022 for Faculty of Veterinary Medicine By-law (Credit hour system, articles one and two.*

- **Training:**

Based on what was stated in the third part of the regulations, which is related to training (internship year), that:

- Students who have successfully completed the five-year study stage will **perform training for a university academic year**, as it will be conducted in scientific departments and places related to veterinary medicine such as units, hospitals, veterinary clinics, slaughterhouses, animal, poultry and fish farms, meat, fish and poultry production factories, dairy factories, oils and fats, and leather factories.
- The College Council determines each year the training groups, the method of distributing students and the scientific content of the training, and the student is not granted a bachelor's degree except after passing the training exams successfully, noting that the student will take a written, oral and practical exam at the end of the training period, provided that the total score is 111 degrees distributed as follows: (41 degrees for written And 61 degrees (oral and practical) so that the student becomes successful by obtaining 51% of the total score and an attendance rate of not less than 75, considering the training as a pass or failure subject and not added to the total score.
- One year of field training in veterinary medicine work and employing representative with a total contact hour 1080.
- Percentage of training according to contact hours: 21.88 %.

- **Computer and ICDL:**
  - ICDL isn't required to obtain a bachelor's degree
  - Biostatistics and computer serve basic and computer and ICDL, Therefore, a section on teaching computer science in Biostatistics course was added in line with NARS 2009, and the new course specification of the Biostatistics and Computer course besides the other courses
  - With a percentage of 0.61%

- **Humanities:**

Science	Number of Credit hours
English and terminology	2
Veterinary economics	3
Human rights and combating corruption	2
Total	**7**

humanities= 7 credit hours representing 120 contact hours

Percentage of humanities according to contact hours: 2.43 %

- **Discretionary subjects:**

Science	Number of Credit hours
Three elective courses	6
Total	6

Discretionary subjects = 6 credit hours representing 105 contact hours

Percentage of Discretionary subjects according to contact hours: 2.12 %

NARS					BVMSc academic standards	
Subject	Range	Sciences	Percent justification		Sciences	Remarks
			Before	After		
Basic sciences	22-28	Biology, biophysics, chemistry, biostatics, animal husbandry, *embryology*, histology, physiology, anatomy	20.06 %	20.06 %	Biology (zoology), Biophysics, Biochemistry (Chemistry – Basic biochemistry – Biochemistry and molecular biology – Metabolism and body fluids), Biostatistics and computer, Animal, poultry, aquatic animal behavior and management (A-B), Anatomy and embryology (A-B-C), Histology (A-B), Physiology (A-B-C).	Close to NARS percentage
Pre-clinical sciences	17-23	Genetics, microbiology, nutrition, mycology, immunology, pharmacology, parasitology, virology, pathology, milk and meat hygiene	22.19 %	22.19 %	Veterinary genetics and genetic engineering, Nutrition and clinical nutrition (A-B), Microbiology (general- special), Immunology, Pharmacology (general-special), Parasitology (A-B), Virology (A-B), Pathology (General- special), Milk and milk products hygiene and technology(A-B), Meat and meat products hygiene and technology (A-B)	Within NARS percentage

Clinical sciences	40-44	Epidemiology and pathogenesis, internal medicine, infectious diseases, forensic medicine and toxicology, poultry and fish diseases, hygiene, surgery, zoonoses, theriogenology, and clinical investigation, and treatment of animals	29.79 %	41.79%	Epidemiology, Internal medicine (General, special(A-B), infectious diseases (A-B), Forensic medicine and veterinary medical ethics – Toxicology, Avian and rabbit medicine (A-B), Aquatic animal medicine (A-B), Animal, poultry, Fish and environmental hygiene (A-B), General Surgery, Anesthesiology and Radiology A-Special Surgery (A-B), zoonoses (A-B), Gynecology of farm and pet animals-Obstetric of farm and pet animals- Andrology and artificial insemination, Pathology (Morbid anatomy), Clinical pathology (A-B)	Justified by adding 12% from training
Training*	2-6	Field trips and clinical investigations	21.88 %	9.88%	One year of field training in veterinary medicine work and employing representative	12% were subtracted from training to compensate the lower clinical %
Computing and ICT	1-3	Computer sciences and application IT	0.61%	0.61%	Biostatics and Computer	Close to NARS
Humanities	2-4	English, economics, human rights and social studies	2.43 %	2.43%	English, Veterinary economics and farm management, human rights	Within the range
Discretionary subjects	4-8	Allowed to each faculty to be used based on its mission	2.12 %	2.12 %	Three elective courses	Lower than NARS

4 - Curriculum structure and content.

4.a) Programme duration: 6 years.

4.b) Programme structure:

A- No. of contact hours and credit hours

Academic year		Lectures	Practical	Total
		Credit hours	Credit hours	Credit hours
1st year	Obligatory courses:	23	12	35
	Elective course:	1	1	2
2nd year	Obligatory courses:	20	11	31
	Elective course:	2	2	4
3rd year	Obligatory courses:	27	14	41
	Elective course:	-	-	-
4th year	Obligatory courses:	27	14	41
	Elective course:	-	-	-
5th year	Obligatory courses:	25	13	38
	Elective course:	-	-	-

B- Training

Academic year	Total contact hours
6th year	1080

Credit hours/ semester

Academic year		1st semester	2nd semester
1st	Obligatory courses:	18	17
	Elective course:	-	2
2nd	Obligatory courses:	17	14
	Elective course:	2	2
3rd	Obligatory courses:	20	21
	Elective course:	-	-
4th	Obligatory courses:	20	21
	Elective course:	-	-
5th	Obligatory courses:	21	17
	Elective course:	-	-
6th (contact hours/ academic year)	1080		

4.bi- Total credit and contact hours:

Items	Lectures	Practical	Training	Total core	Elective	Total core + elective
Credit	122	64	-	186	6	192
Contact hours	1830	1920	1080	4830	105	4935

4.bii- No of contact hours compulsory (4935)

4.biii- No of contact hours of basic sciences: **No:** 990 **%:** 20.06

4.biv- No of contact hours of social science and humanities: **No:** 120 %: 2.43

4.bv- No of contact hours of specialized: No: 2565 %:51.99

4.bvi- discretionary subjects: **No:** 105 **%:** 2.12

4.bvii- No of field training contact hours: **No:**1080 **%:**21.88

4.bviii- Single programme

Table (1) curriculum structure and course percentage

A. Academic and pre-clinical level (first, second and third levels)

Academic year		Code No	Course title	Total credit hours	Percentage
First level	1st semester	111 -أ ن ج	**English language and terminology**	2	1.04
		112- ب ي و	Biology (zoology)	2	1.04
		113 - ف ي ح	Biophysics	2	1.04
		114- ت ث ح	Veterinary Genetic and Genetic engineering (A)	2	1.04
		115- ت ش أ	Anatomy and embryology (A)	3	1.56
		116- أ ن خ	Histology (A)	3	1.56
		117 - ك ي م	Chemistry	2	1.04
		118- ح ق أ	Human rights and combating corruption	2	1.04
		Total		18	9.37
	2nd semester	121- ك ي ح	Basics of biochemistry	3	1.56
		122 – ت ث ح	Biostatics and computer	3	1.56
		123- ت ث ح	Veterinary Genetic and Genetic engineering (B)	2	1.04
		124- ت ش أ	Anatomy and embryology (B)	3	1.56
		125- أ ن خ	Histology (B)	3	1.56
		126- ف س ي	Physiology (A)	3	1.56
		-	Elective course	2	1.04
		Total		19	9.89

Academic year		Code No	Course title	Total credit hours	Percentage
Second level	1st semester	ك ي ح -211	Biochemistry and molecular biology	2	1.04
		ف س ي – 212	Physiology (B)	3	1.56
		ت ش أ – 213	Anatomy and embryology (C)	3	1.56
		ت ث ح – 214	Veterinary economics	3	1.56
		ت ث ح – 215	Breeding and production of animal, poultry and fish (A)	3	1.56
		س ر ح -216	Animal, poultry, aquatic animal behavior and management (A)	3	1.56
		-	Elective course	2	1.04
		Total		19	9.89
	2nd semester	ك ي ح -221	Metabolism and body fluids	3	1.56
		ف س ي – 222	Physiology (C)	2	1.04
		ب أ ث – 223	Pathology (General)	3	1.56
		ت ف ح – 224	Breeding and production of animal, poultry and fish (B)	3	1.56
		س ر ح – 225	Animal, poultry, aquatic animal behavior and management (B)	3	1.56
		-	Elective course	2	1.04
		Total		16	8.33

Academic year		Code No	Course title	Total credit hours	Percentage
Third level	1st semester	ف أ ر – 311	Pharmacology (General)	3	1.56
		ف ي ر – 312	Virology (A)	3	1.56
		ب أ ث – 313	Pathology (Special)	3	1.56
		م ي ك – 314	Microbiology (General)	3	1.56
		ط ف ي – 315	Parasitology (A)	3	1.56
		ت ت ك – 316	Nutrition and clinical nutrition (A)	3	1.56
		م ي ك -317	Immunology	2	1.04
		Total		20	10.42
	2nd semester	ف أ ر – 321	Pharmacology (Special)	3	1.56
		ف ي ر – 322	Virology (B)	3	1.56
		ب أ ث – 323	Pathology (Morbid anatomy)	3	1.56
		م ي ك – 324	Microbiology (Special)	3	1.56
		ط ف ي – 325	Parasitology (B)	3	1.56
		ط ش س – 326	Toxicology	3	1.56
		ت ت ك – 327	Nutrition and clinical nutrition (B)	3	1.56
		Total		21	10.94

B. Clinical level (fourth and fifth levels)

Academic year		Code No	Course title	Total credit hours	Percentage
Fourth level	1st semester	411 – ط ب ح	Internal medicine (General)	3	1.56
		412 – ط ش س	Forensic medicine and veterinary medical ethics	3	1.56
		413 – ص ع ب	Veterinary epidemiology	2	1.04
		414 – ب أ ك	Clinical pathology (A)	3	1.56
		415 – ط أ م	Aquatic animal medicine (A)	3	1.56
		416 – ص ع ب	Animal, poultry, fish and environmental hygiene (A)	3	1.56
		417 – ص س ت	Milk and milk products hygiene and technology (A)	3	1.56
		Total		20	10.42
	2nd semester	421 – ط ب ح	Internal medicine (Special A)	3	1.56
		422 – ج ت أ	General surgery, anesthesiology and radiology	3	1.56
		423 – ت ت ت	Gynecology of farm and pet animals	3	1.56
		424 – ب أ ك	Clinical pathology (B)	3	1.56
		425 – ط أ م	Aquatic animal medicine (B)	3	1.56
		426 – ص ع ب	Animal, poultry, fish and environmental hygiene (B)	3	1.56
		427 – ص س ت	Milk and milk products hygiene and technology (B)	3	1.56
		Total		21	10.94

Academic year		Code No	Course title	Total credit hours	Percentage
Fifth level	1st semester	511- أ م م	Zoonosis (A)	3	1.56
		512 – ط ب ح	Internal medicine (Special B)	3	1.56
		513 – ط ب ح	Infectious diseases (A)	3	1.56
		514 – ج ت أ	Special surgery (A)	3	1.56
		515 – ت ت ت	Obstetrics of farm and pet animals	3	1.56
		516 – ط ط أ	Avian and rabbit medicine (A)	3	1.56
		517 – ص س ت	Meat and meat products hygiene and technology (A)	3	1.56
		Total		20	10.42
	2nd semester	521- أ م م	Zoonosis (B)	2	1.04
		522 – ط ب ح	Infectious diseases (B)	3	1.56
		523 – ج ت أ	Special surgery (B)	3	1.56
		524 – ت ت ت	Andrology and artificial insemination	3	1.56
		525 – ط ط أ	Avian and rabbit medicine (B)	3	1.56
		526 – ص س ت	Meat and meat products hygiene and technology (B)	3	1.56
		Total		17	8.85

C. Training level (six level)

Academic year	Code No	Course title	Total Contact hours
Six level	611 – ف أ ر	Pharmacology-T	49
	612 – ف ي ر	Virology- T	49
	613 – ب أ ث	Pathology- T	49
	614 – م ي ك	Microbiology - T	49
	615 – ط ف ي	Parasitology - T	49
	616 – ت ت ك	Nutrition and clinical nutrition - T	49
	617 – ب أ ث	Pathology (Morbid anatomy) - T	49
	618 – ط ب ح	Internal medicine - T	49
	619 – ط ش س	Forensic medicine and veterinary medical ethics - T	49
	620 – ب أ ك	Clinical pathology -T	49
	621 – ط أ م	Aquatic animal medicine - T	49
	622 – ص ع ب	Animal, poultry, fish and environmental hygiene - T	49
	623 – ص س ت	Milk and milk products hygiene and technology - T	49
	624 – ج ت أ	General surgery, anesthesiology and radiology - T	50
	625 – ت ت ت	Gynecology of farm and pet animals T	50
	626 – ط ب ح	Internal medicine - T	49
	627- أ م م	Zoonosis - T	49
	628 – ط ب ح	Infectious diseases - T	49
	629 – ج ت أ	Special surgery - T	49
	630 – ت ت ت	Andrology and artificial insemination - T	49
	631 – ط ط أ	Avian and rabbit medicine - T	49
	632 – ص س ت	Meat and meat products hygiene and technology -T	49
Total			1080

5- Programme courses

5-1- First level- Semester I

Code No	Course title	No. of credit hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
111 -أ ن ج	English language and terminology	2	-	2	1	2, 5, 6	-	2, 6
112- ب ي و	Biology (zoology)	1	1 (2)	2	3, 6, 9	2, 6	20	1, 6
113 - ف ي ح	Biophysics	1	1 (2)	2	6	2, 3, 4, 5	22	1, 2, 6
114- ت ث ح	Veterinary Genetic and Genetic engineering (A)	1	1 (2)	2	2, 5, 7, 14, 17	2, 3, 4, 5, 6, 7, 9	2	1, 2, 6
115- ت ش أ	Anatomy and embryology (A)	2	1 (2)	3	1, 3, 5	2, 3, 4	18, 20	1, 2, 7
116- أ ن خ	Histology (A)	2	1 (2)	3	2, 3	2, 3, 4, 5	20	1, 2, 3, 7
117 - ك ي م	Chemistry	1	1 (2)	2	2, 6, 7, 16	2, 3, 4, 5, 6, 7	22	1, 2, 6
118- ح ق أ	Human rights and combating corruption	2	-	2	35	2, 6	23	2
Total		12	6 (12)	18				

5-2- First level- Semester II

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
121- ك ي ح	Basics of biochemistry	2	1 (2)	3	2, 6, 7, 16	2, 3, 4, 5, 6, 7	22	1, 2, 6
122 – ت ث ح	Biostatics and computer	2	1 (2)	3	6, 8, 36	2, 3, 4, 5, 6, 9	14	1, 2, 4, 6
123- ت ث ح	Veterinary Genetic and Genetic engineering (B)	1	1 (2)	2	2, 5, 7, 14, 17	2, 3, 4, 5, 6, 7, 9	2	1, 2, 6
124- ت ش أ	Anatomy and embryology (B)	2	1 (2)	3	1, 3, 5	2, 3, 4	18, 20	1, 2, 7
125- أ ن خ	Histology (B)	2	1 (2)	3	2, 3	2, 3, 4, 5	20	1, 2, 3, 7
126- ف س ي	Physiology (A)	2	1 (2)	3	2, 4, 33	2, 3, 4, 5, 6, 7, 9	18, 22	1, 2, 6
-	Elective course	1	1 (2)	3				
	Total	12	7 (14)	19				

5-3- Second level- Semester I

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
211- ك ي ح	Biochemistry and molecular biology	1	1 (2)	2	2, 6, 7, 16	2, 3, 4, 5, 6, 7	22	1, 2, 6
212 – ف س ي	Physiology (B)	2	1 (2)	3	2, 4, 33	2, 3, 4, 5, 6, 7, 9	18, 22	1, 2, 6
213 – ت ش أ	Anatomy and embryology (C)	2	1 (2)	3	1, 3, 5	2, 3, 4	18, 20	1, 2, 7
214 – ت ث ح	Veterinary economics	2	1 (2)	3	8, 14	2, 3, 4, 5, 6, 7, 9	14	1, 2, 3, 6, 7
215 – ت ث ح	Breeding and production of animal, poultry and fish (A)	2	1 (2)	3	9, 11, 13, 14, 36	2, 3, 4, 5, 6, 7, 9	19	1, 2, 4, 6
225 – س ر ح	Animal, poultry, aquatic animal behavior and management (B)	2	1 (2)	3	1, 9, 12, 33, 36	2, 3, 4, 5, 6, 7	1	1, 2, 7
-	Elective course	1	1 (2)	2				
	Total	12	7 (14)	19				

5-4- Second level- Semester II

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
221- ك ي ح	Metabolism and body fluids	2	1 (2)	3	2, 6, 7, 16	2, 3, 4, 5, 6, 7	22	1, 2, 6
222 – ف س ي	Physiology (C)	1	1 (2)	2	2, 4, 33	2, 3, 4, 5, 6, 7, 9	18, 22	1, 2, 6
223 – ب أ ث	Pathology (General)	2	1 (2)	3	10, 16, 18	2, 3, 4, 5, 6, 7, 9	3	1, 2, 3
224 – ت ف ح	Breeding and production of animal, poultry and fish (B)	2	1 (2)	3	9, 11, 13, 14, 36	2, 3, 4, 5, 6, 7, 9	19	1, 2, 4, 6
225 – س ر ح	Animal, poultry, aquatic animal behavior and management (B)	2	1 (2)	3	1, 9, 12, 33, 36	2, 3, 4, 5, 6, 7	1	1, 2, 7
-	Elective course	1	1 (2)	2				
	Total	10	6 (12)	16				

5-5 Third level - Semester I

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
311 – ف أ ر	Pharmacology (General)	2	1 (2)	3	15, 19, 20, 29, 30	2, 3, 4, 5, 6, 7, 9	1, 11. 22, 23	1, 2, 6
312 – ف ي ر	Virology (A)	2	1 (2)	3	2, 16, 17, 22	2, 3, 4, 5, 6, 7	2, 13, 22	1, 2
313 – ب أ ث	Pathology (Special)	2	1 (2)	3	10, 16, 18	2, 3, 4, 5, 6, 7, 9	3	1, 2, 3
314 – م ي ك	Microbiology (General)	2	1 (2)	3	16, 17	2, 3, 4, 5, 6, 7	2, 13, 22	1, 2, 6
315 – ط ف ي	Parasitology (A)	2	1 (2)	3	16, 17	2, 4, 5	2	1, 2
316 – ت ت ك	Nutrition and clinical nutrition (A)	2	1 (2)	3	10, 17, 28	2, 3, 4, 5, 6, 7, 9	2, 5	1, 2, 6
317- م ي ك	Immunology	1	1 (2)	2	16, 17	2, 3, 4, 5, 6	2, 22	1, 2, 6
	Total	13	7 (14)	20				

5-6 Third level- Semester II

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
321 – ف أ ر	Pharmacology (Special)	2	1 (2)	3	15, 19, 20, 29, 30	2, 3, 4, 5, 6, 7, 9	1, 11. 22, 23	1, 2, 6
322 – ف ي ر	Virology (B)	2	1 (2)	3	2, 16, 17, 22	2, 3, 4, 5, 6, 7	2, 13, 22	1, 2
323 – ب أ ث	Pathology (Morbid anatomy)	2	1 (2)	3	10, 16, 18	2, 3, 4, 5, 6, 7, 9	3	1, 2, 3
324 – م ي ك	Microbiology (Special)	2	1 (2)	3	16, 17	2, 3, 4, 5, 6, 7	2, 13, 22	1, 2, 6
325 – ط ف ي	Parasitology (B)	2	1 (2)	3	16, 17	2, 4, 5	2	1, 2
326 – ط ش س	Toxicology	2	1 (2)	3	17, 30	2, 3, 4, 5, 6, 9	2	1, 2, 6
327 – ت ت ك	Nutrition and clinical nutrition (B)	2	1 (2)	3	10, 17, 28	2, 3, 4, 5, 6, 7, 9	2, 5	1, 2, 6
Total		14	7 (14)	21				

5-7 Fourth level- Semester I

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
411 – ط ب ح	Internal medicine (General)	2	1 (2)	3	13, 15, 19, 31	1, 3, 4, 5, 6, 7, 8, 9	1, 3, 4, 12, 16, 23	1, 2, 6
412 – ط ش س	Forensic medicine and veterinary medical ethics	2	1 (2)	3	17, 30	2, 3, 4, 5, 6, 9	2	1, 2, 6
413 – ص ع ب	Veterinary epidemiology	1	1 (2)	2	22, 26, 27, 28, 29, 32, 33, 34, 36	2, 3, 4, 5, 6, 7, 8, 9	10, 18, 22	1, 2, 4, 5, 6, 7
414 – ب أ ك	Clinical pathology (A)	2	1 (2)	3	2, 16, 18	2, 3, 4, 5, 6, 7	2, 3, 22	1, 2, 6
415 – ط أ م	Aquatic animal medicine (A)	2	1 (2)	3	1, 10, 13, 15, 16, 19, 24, 25, 36	1, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 7, 9, 10, 11, 13, 23	1, 2, 4, 5, 7
416 – ص ع ب	Animal, poultry, fish and environmental hygiene (A)	2	1 (2)	3	22, 26, 27, 28, 29, 32, 33, 34, 36	2, 3, 4, 5, 6, 7, 8, 9	10, 18, 22	1, 2, 4, 5, 6, 7
417 – ص س ت	Milk and milk products hygiene and technology (A)	2	1 (2)	3	20, 21, 32, 36	2, 3, 4, 5, 6, 7	15, 22	1, 2, 6, 7
Total		13	7 (14)	20				

5-8 Fourth level - Semester II

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
421 – ط ب ح	Internal medicine (Special A)	2	1 (2)	3	13, 15, 19, 31	1, 3, 4, 5, 6, 7, 8, 9	1, 3, 4, 12, 16, 23	1, 2, 6
422 – ج ت أ	General surgery, anesthesiology and radiology	2	1 (2)	3	15, 19, 31, 33	1, 2, 3, 4, 6, 7, 8, 9	1, 2, 3, 4, 6, 8, 9, 11, 12, 23	1, 2, 4, 6, 7
423 – ت ت ت	Gynecology of farm and pet animals	2	1 (2)	3	5, 12, 13, 14, 15, 19, 25, 31	1, 2, 3, 4, 5, 6, 7, 8, 9	3, 4, 6, 8, 9, 11, 13, 17, 23	1, 2, 4, 6
424 – ب أ ك	Clinical pathology (B)	2	1 (2)	3	2, 16, 18	2, 3, 4, 5, 6, 7	2, 3, 22	1, 2, 6
425 – ط أ م	Aquatic animal medicine (B)	2	1 (2)	3	1, 10, 13, 15, 16, 19, 24, 25	1, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 7, 9, 10, 11, 13, 23	1, 2, 4, 5, 7
426 – ص ع ب	Animal, poultry, fish and environmental hygiene (B)	2	1 (2)	3	22, 26, 27, 28, 29, 32, 33, 34	2, 3, 4, 5, 6, 7, 8, 9	10, 18, 22	1, 2, 4, 5, 6, 7
427 – ص س ت	Milk and milk products hygiene and technology (B)	2	1 (2)	3	20, 21, 32, 36	2, 3, 4, 5, 6, 7	15, 22	1, 2, 6, 7
Total		14	7 (14)	21				

5-9 Fifth level- Semester I

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
511- أ م م	Zoonosis (A)	2	1 (2)	3	1, 15, 16, 22, 25, 27, 34, 36	2, 3, 4, 5, 6, 7, 8, 9	2, 10, 13, 23	1, 2, 3, 5, 6, 7
512 – ط ب ح	Internal medicine (Special B)	2	1 (2)	3	13, 15, 19, 31	1, 3, 4, 5, 6, 7, 8, 9	1, 3, 4, 12, 16, 23	1, 2, 6
513 – ط ب ح	Infectious diseases (A)	2	1 (2)	3	15, 19, 25	1, 2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 7, 9, 11, 12, 13, 16, 21, 23	1, 2, 4, 5, 6, 7
514 – ج ت أ	Special surgery (A)	2	1 (2)	3	15, 19, 31, 33	1, 2, 3, 4, 6, 7, 8, 9	1, 2, 3, 4, 6, 8, 9, 11, 12, 23	1, 2, 4, 6, 7
515 – ت ت ت	Obstetrics of farm and pet animals	2	1 (2)	3	5, 12, 13, 14, 15, 19, 25, 31	1, 2, 3, 4, 5, 6, 7, 8, 9	3, 4, 6, 8, 9, 11, 13, 17, 23	1, 2, 4, 6
516 – ط ط أ	Avian and rabbit medicine (A)	2	1 (2)	3	10, 13, 15, 16, 19, 24, 25, 26, 33, 36	1, 2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 7, 9, 11, 13, 16, 18, 21, 23	1, 2, 4, 5, 6, 7
517 – ص س ت	Meat and meat products hygiene and technology (A)	2	1 (2)	3	20, 21, 23, 32, 36	2, 3, 4, 5, 6, 7, 9	7, 15, 22, 23	1, 2, 5, 6, 7
	Total	14	7 (14)	21				

5-10 Fifth level -Semester II

Code No	Course title	No. of hours / week			Programme ILOs covered (by No.)			
		Lect.	Lab.	Total	K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
521- أ م م	Zoonosis (B)	1	1 (2)	2	1, 15, 16, 22, 25, 27, 34, 36	2, 3, 4, 5, 6, 7, 8, 9	2, 10, 13, 23	1, 2, 3, 5, 6, 7
522 – ط ب ح	Infectious diseases (B)	2	1 (2)	3	15, 19, 25	1, 2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 7, 9, 11, 12, 13, 16, 21, 23	1, 2, 4, 5, 6, 7
523 – ج ت أ	Special surgery (B)	2	1 (2)	3	15, 19, 31, 33	1, 2, 3, 4, 6, 7, 8, 9	1, 2, 3, 4, 6, 8, 9, 11, 12, 23	1, 2, 4, 6, 7
524 – ت ت ت	Andrology and artificial insemination	2	1 (2)	3	5, 12, 13, 14, 15, 19, 25, 31	1, 2, 3, 4, 5, 6, 7, 8, 9	3, 4, 6, 8, 9, 11, 13, 17, 23	1, 2, 4, 6
525 – ط ط أ	Avian and rabbit medicine (B)	2	1 (2)	3	10, 13, 15, 16, 19, 24, 25, 26, 33, 36	1, 2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 7, 9, 11, 13, 16, 18, 21, 23	1, 2, 4, 5, 6, 7
526 – ص س ت	Meat and meat products hygiene and technology (B)	2	1 (2)	3	20, 21, 23, 32, 36	2, 3, 4, 5, 6, 7, 9	7, 15, 22, 23	1, 2, 5, 6, 7
	Total	11	6 (12)	17				

5-11 six level- Training

Code No	Course title	Total Contact	Programme ILOs covered (by No.)			
			K.U (a)	I.S (b)	P.S (c)	G.T.S (d)
611 – ف أ ر	Pharmacology-T	49	15, 19, 20	3, 4, 5, 9	11. 22	1, 2, 6
612 – ف ي ر	Virology- T	49	16	4, 5	2, 13, 22	1, 2
613 – ب أ ث	Pathology- T	49	10, 16, 18	2, 3, 4, 5, 6, 7, 9	3	1, 2, 3
614 – م ي ك	Microbiology - T	49	16, 17	2, 3, 4, 5, 6, 7	2, 13, 22	1, 2, 6
615 – ط ف ي	Parasitology - T	49	16, 17	4	2	1, 2
616 – ت ت ك	Nutrition and clinical nutrition - T	49	10	3, 4, 5, 9	2	1, 2
617 – ب أ ث	Pathology (Morbid anatomy) - T	49	16, 18, 33	2, 3, 4, 5, 6, 7, 9	3, 7, 18	1, 2, 6
618 – ط ب ح	Internal medicine - T	49	13, 15, 19, 31	1, 3, 4, 5, 6, 7, 8, 9	1, 3, 4, 12, 16	1, 2, 6
619 – ط ش س	Forensic medicine and veterinary medical ethics - T	49	17, 30	2, 3, 4, 5, 6, 9	2	1, 2, 6
620 – ب أ ك	Clinical pathology -T	49	16, 18	2, 3, 6, 7	2, 3, 22	1, 2, 6

621 – ط أ م	Aquatic animal medicine - T	49	1, 10, 13, 15, 16, 19, 24, 25	1, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 7, 9, 10, 11, 13	1, 2, 4, 5, 7
622 – ص ع ب	Animal, poultry, fish and environmental hygiene - T	49	29, 34	3, 4, 7, 8	10	1, 2, 6
623 – ص س ت	Milk and milk products hygiene and technology - T	49	20, 32	2, 3, 4, 5, 6, 7	15, 22	1, 2, 6
624 – ج ت أ	General surgery, anesthesiology and radiology - T	50	15, 19, 31,33	1, 2, 3, 4, 6, 7, 8, 9	1, 2, 3, 4, 6, 8, 9, 11, 12	1, 2, 4, 6
625 – ت ت ت	Gynecology of farm and pet animals T	50	5, 12, 13, 14, 15, 25, 31	1, 2, 3, 4, 5, 6, 7, 8	3, 4, 6, 8, 9, 11, 13, 17	1, 2, 4, 6
626 – ط ب ح	Internal medicine - T	49	13, 15, 19, 31	1, 3, 4, 5, 6, 7, 8, 9	1, 3, 4, 12, 16	1, 2, 6
627- أ م م	Zoonosis - T	49	16, 22, 34	2, 3, 4, 8	2, 10, 13	1, 2
628 – ط ب ح	Infectious diseases - T	49	15, 25	2, 3, 8, 9	2, 3, 4, 11, 12, 16	2, 4, 6
629 – ج ت أ	Special surgery - T	49	15, 19, 31,33	1, 2, 3, 4, 6, 7, 8, 9	1, 2, 3, 4, 6, 8, 9, 11, 12	1, 2, 4, 6
630 – ت ت ت	Andrology and artificial insemination - T	49	5, 12, 13, 14, 15, 25, 31	1, 2, 3, 4, 5, 6, 7, 8	3, 4, 6, 8, 9, 11, 13, 17	1, 2, 4, 6
631 – ط ط أ	Avian and rabbit medicine - T	49	19, 24, 25	2, 3, 4, 7, 8, 9	11, 16, 21	1, 2
632 – ص س ت	Meat and meat products hygiene and technology -T	49	23, 32	4, 6, 7, 9	15, 22	1, 6
Total		1080				

6 - Programme admission requirement:

The student could admit joining the Bachelor of Veterinary Medical Sciences programme if he/she has one of the following:

1) The general Secondary school certificate, science branch with the grades stated by the Central Admission Office.
2) A percentage of students enrolled are holders of the equivalent certificates such as the American Diploma and IGCSE.
3) A percentage of students from Arab countries with the equivalent grades determined by the Ministry of Higher Education, Central Admission office in the same academic year.
4) Students can be transferred from equivalent governmental universities with a condition of minimum good grades and if health and social status necessitate this transfer.

7. Teaching and learning methods

7.1- Lectures

- The syllabus is distributed on staff members in department council and illustrated onsite using different teaching methods including blackboard, Overhead projector and Data show.

7.2- Practical training / laboratory

A practical session was supervised by professors. Lectures give the basis and then students were divided into groups who were supervised by assistant staff all over the session.

7.3- Other teaching methods

Case studies, E-Learning, hospital cases, field trips and visits.

7.4- Teaching and learning methods for students facing difficulties

According to Faculty council decree on 12/4/2010, the department will apply special procedures to explore and help the students who face difficulties to achieve the required knowledge and skills related to pharmacology through additional lectures and/or practical sessions.

- Rapid revision of discussed topics.
- Open discussion.
- Make the official hours more effective.

8. Assessment of Student Learning

1). Assessment methods measure student performance in all of the professional competencies in accordance with the stated outcome expectations.

2). Basis on which Assessment of Student Achievements are evaluated by periodic quizzes, formal written examination, summative practical assessment, laboratories and other written reports, problem-solving exercises, oral examination and oral presentations.

3). For each course, a final written examination is held at the end of each semester, with a score of 50% of the course's assessment scores, in addition to an oral examination (10 %), practical (20%) and periodic (20%) exams. The student must attend 75% of all the lectures and practical hours of the course in order to be allowed to enter the final exam of the course.

4). The student is not considered successful in any course unless he obtains at least a grade "**F**"

5). The course in which the student gets a grade **"F",** he repeats it, and his grade is calculated for him in it as a maximum **D+**.

Grading Scheme is as follows:

Percent	Equivalent Rate	GPA	Letter Grade
95% to 100%	Excellent (+)	3.7 to 4	A+
90% to <95%	Excellent	3.4 to <3.7	A
85% to <90%	Excellent (-)	3.1 to <3.4	A -
80% to <85%	Very good (+)	2.8 to <3.1	B +
75% to <80%	Very good	2.5 to <2.8	B
70% to <75%	Good (+)	2.2 to <2.5	C +
65% to <70%	Good	1.9 to <2.2	C
60% to <65%	Pass (+)	1.6 to <1.9	D +
55% to <60%	Pass	1.3 to <1.6	D
50% to <55%	Pass (-)	1 to <1.3	D -
Less than 50%	Fail	Zero	F
Less than 30% of written exam	Fail	Zero	F

9 - Regulations for progression and programme completion.

The policy of student retention and progression are determined according to the University regulations. The student is not entitled to move to the higher level if he fails in more than two courses, and this condition is not considered when registering for the second semester courses for the same level. In all cases, success in the registration requirements in the courses is considered. The student is not entitled to move to the clinical stage until after successfully passing all the courses of the two academic levels and the pre-clinical level.

Obtaining a Bachelor's degree in Veterinary Medicine requires success in all compulsory courses (66) courses equivalent to (186) credit

hours. General elective courses (3 courses) equivalent to 6 credit hours, their grades are recorded. It is estimated in the graduation certificate and is not included in the total or the cumulative average. Pass the training exam and get 50% of the assessment scores.

8 - Evaluation of programme intended learning outcomes:

Evaluator	Tool	Samples
1- Senior students	Questionnaires and open discussion	50/ Grade
2- Alumni	Questionnaires and open discussion	25
3- Stakeholders (Employers)	Questionnaires and open discussion	Random
4- External Evaluators	Report	-
Other (External examiners)	Report	-

Program coordinator

Prof. Dr. Mohamed El-Sayed Mohamed

Dean of the Faculty

Prof. Dr. Nasr Abd El-Wahab Mohamed

Faculty council approval date 12/9/2022