

**KINGDOM OF SAUDI ARABIA  
MINISTRY OF EDUCATION  
QASSIM UNIVERSITY**

**College of Agriculture and  
Veterinary Medicine**

**Veterinary Medicine Program**

**Student Guide**

**New Study Plan**

**Academic year 2018 -2019**

**Dear Student:**

**You are welcome to Veterinary Medicine Program  
(VMD)**



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## **Veterinary Medicine Program Description**

### **Establishment, management and location**

This program is administrated through department of Veterinary Medicine as one of four departments among the College of Agriculture and Veterinary Medicine Qassim University. The College in the main university campus at Melida area 23 km south to the centre of Buryhdah, the capital of Qassim Region, KSA.

The Department of Veterinary Medicine has been established in 1987 to qualify Saudi students for the degree of Bachelor of Veterinary Medicine (BVM). The veterinary degree curriculum comprises theoretical and practical courses which are taught through a period of five years. The graduate is qualified to fit in various disciplines of the veterinary profession such as diagnosis, treatment and control of animal diseases as well as prevention of diseases communicable to man from animals. The curriculum also aims at promoting research career, and professional higher degree training.

### **Mission**

The mission of the Department of Veterinary Medicine is to provide teaching, research and community service programs that benefit the animals, people and environment.

**Vision**

The vision is to be a really pioneer and distinguished programme in the field of veterinary medical education and research, to be able to compete with international levels of developments and to satisfy the community with basic requirements in animal and poultry resources.

**Objectives**

- Providing programs of education and postgraduate studies in veterinary medicine, so that graduates are equipped with a strong basis in science, technical skills and skills in continuous learning which allow them to develop during their careers
- Pursuing excellence in veterinary research for better teaching skills and field application
- Providing service to the community and the veterinary profession to ensure the quality and safety of animal products

Veterinary graduates are qualified to work in many governmental and non-governmental bodies such as: veterinary clinics; research laboratories; milk, meat, poultry and fish producing farms; quarantines; racing clubs; veterinary medicine teaching institutions; food hygiene and environmental health departments in the municipalities; Ministry of health (Food Hygiene and Laboratories) and academic institutions.

Other objectives of the department include investigating diseases of livestock in the country and finding possible solutions for them. The Department actively participates in community service through the activities of its teaching veterinary clinic, qualifying graduates with M.V.M., carrying out research on various veterinary problems and

finding suitable solution for them, extension work and training courses for veterinary surgeons and assistants.

The research farm belonging to the college of Agriculture and Veterinary Medicine in which dairy, sheep, goat, horses, camel and poultry units enable the students to make much use of the practical sessions and to execute the required research projects.

The Veterinary Hospital has been established to serve as a teaching veterinary hospital, offer services to the community and help to promote research on animal diseases in the area. The hospital is well equipped to manage medical, surgical, obstetrical and gynaecological cases. It has a diagnostic laboratory, a pharmacy and teaching theatres. There is also a necropsy unit and an incinerator for the disposal of dead animals. Appreciable numbers of clinical cases are brought daily to the hospital; they include cattle, sheep, goats, horses and camels as well as different types of pets and falcons are occasionally treated at the hospital. Specialists from the academic staff of the Department of Veterinary Medicine, surgeons and veterinary medical assistants conduct the various activities in the hospital. The hospital has the necessary equipments for diagnosis and medical or surgical management. In addition, the clinical courses are taught in the hospital: these are Veterinary Medicine, Surgery, Theriogenology and Clinical Pathology. Clinical training of senior students is also carried out in the Veterinary Teaching Hospital which receives an average of 50-70 cases per day from different areas of Qassim region as well as other parts of the Kingdom.

### **Admission Conditions**

The council of the College of Agriculture and Veterinary Medicine designates the number of students to be admitted to the college. Each applicant should fulfil the following requirements:

1. High School certificate ( Scientific branch) with an aggregate score of not less than 70%.
2. Agricultural High School certificate with a grade of very good and passing the supplementary session offered by the college for one semester.
3. Passing the personal interview which is held by the college.
4. A certificate of good conduct.
5. Applicant should be medically fit.

#### **The Documents needed to be submitted upon joining the university**

Each applicant should submit the following:

1. Secondary school certificate / with transcript (Scientific Branch).
2. Certificate of good conduct.
3. Photocopy of the Identification Card.
4. 6 photos 4 x 6.
5. In addition to the aforementioned documents, The foreign students should submit certificate of study permit.

#### **Requirements for the Bachelor of Veterinary Sciences**

- To receive the Bachelor Degree in Veterinary Medicine, the student must successfully complete 186 counted units.
- The credit hours comprise the followings:

- A- Preparatory courses: These include, Islamic culture, Arabic language, English language, Zoology, General and Organic Chemistry, Mathematics, Physics, Statistics, Computer Science and Economics.
  - B- Specialization courses;
    - 1- Basic courses: Physiology, Endocrinology, Biochemistry, Embryology, Histology and Anatomy.
    - 2- Para-clinical courses: Microbiology, Immunology, Parasitology, Pathology, Pharmacology and Toxicology.
    - 3- Clinical courses: Medicine, Surgery, Theriogenology, Preventive Medicine, Food Hygiene, Poultry Diseases, Wild life Diseases, Zoonoses and Clinical Pathology.
- In addition to these courses, students take courses in Animal Production, Genetics and Breeding as well as Nutrition.

### **Registration**

Registration is done automatically at the beginning of each academic term according to certain procedures. Every student must pick up his study schedule on the first day of each term, from the Office of Admission and Registration. The student is encouraged to attend classes regularly since attendance is taken from the first day of study. If a student meets a problem in registration, he should consult his academic advisor or refer to the Office of Students Affairs at the college to solve his problem.

### **Graduation**

The graduating students anticipating graduation must refer to the Dean of Admission and Registration to make sure that they have already fulfilled the requirements of graduation and they must also fill out the form concerning the Graduates Bulletin during the first week of the anticipated term. Student should submit the following:

1. Photo 4 x 6 cm
2. Photocopy of the passport (First page only for the graduates who would like names to be written in English).
3. Photocopy of the Identification Card (for Saudi only). On this occasion, the university kindly invites you to attend the graduation ceremony.

### **Condition for obtaining First or Second Class Honours**

Students receiving honours must:

- A) Not have failed any course (s), whether at the university, or at any other university.
- B) Have completed the courses required for graduation in the average time of matriculation.
- C) First Class Honours are awarded to students graduating with a grade point average (GPA) between 4.75 and 5.0. Second Class Honours are conferred on students graduating with a grade point average (GPA) between 4.25 and 4.75.

### **Academic Identification Cards**

An Identification card is issued to every student accepted at the university for:

1. Use on campus.
2. Receiving the monthly award.
3. Borrowing books from the College library.

4. Buying books from the College book-store.
5. Entering examinations.
6. Entering athletic centres or soccer fields.

### **Services offered to students**

1. **Health care:** The university has a health care unit, equipped with basic medical equipment and a pharmacy, and run by a general practitioner. Serious cases of patients are referred to specialists at Buraida Central Hospital or King Fahad Specialist Hospital where they get free treatment.
2. **Travel:** The University offers the Saudi student a free one round – trip plane ticket from the students home town to Al-Qassim once a year, in addition to other plane tickets reduced up to 50% at any time they wish.
3. **Food:** The university provides nutritious meals for students prepared by dieticians at discount prices.
4. **Journey:** The objectives of such journeys are to acquaint the students with the modern progress and achievements in civilization and architecture in the Kingdom and to strengthen the relationships of brotherhood and friendliness among them.
5. **Scouting:** The scouting movements equip the students with the Islamic teachings and encourages them to depend on themselves, to please and help themselves and help their fellow citizens.
6. **Social, Cultural, and Athletic Care:** Certain committees are set up to organize the social, cultural, and athletic

activities of the students. Each committee is supervised by a faculty member:

- A) **The Social Committee:** It encourages the social activities and develops help and cooperation among students. It organizes recreational trips and strengthens friendship relations between faculty members and students. It organizes parties for active students in the extra-curricular activities and distributes to them gifts and prizes.
  - B) **The cultural Committee:** It focuses on the development of art activities and talents of students. It organizes general lectures to which renowned speakers, literary men, and scientists are invited to give general lectures. The students participate in a number of intercollegiate competitions such as writing stories, dramas, prose and poetry.
  - C) **The Athletic Committee:** It promotes the athletic cooperation among student and develops the athletic by convening a number of Interco land intercollegiate competitions in which students and faculty members participate.
7. **Academic Advising:** Each group of students will be assigned an academic advisor to them. The advisor helps students academically, follows their achievements, and solves their problems until they graduate.
  8. **Awards:** The university students are granted a thousand Saudi Riyals a month as a financial help.
  9. **Student Financial Box:** It offers several services to students such as, monetary aids, Loans, financial support to the social, cultural, scientific, and athletic activities, in addition to offering prizes for the distinguished students and securing photocopy machines.

## **Regulations and Procedures Regulating Students Affairs**

1- **Study system:** A. The university follows the “level system” of study.

B. The academic study at the university consists of ten levels for Veterinary Medicine Department.

C. Student moves from a level to a higher level according to the regulations of movement from a level to another.

D. Registration of students takes place automatically.

2- **Regulations of Transferring From a Level to Another:**

1. Student is transferred from a level to the next level, which follows

it if he successfully completes all the courses of that level.

2. If a student fails a course or more, he must repeat it / them According to the following procedures:

A. If a student fails a number of courses equal to 12 academic units or more, he must only repeat those courses of that level. (See section C on next page).

B. If a student fails a number of courses (whose sum total is Less than 12 academic units) he must repeat the failure courses and study additional courses from a higher level on these conditions:

1. Registration should be in accordance with the study schedule and curriculum.
2. Student's study load should be attached to his cumulative grade point average on condition that the load will not be less than the minimum load and not more than the maximum allowed limit. ((See section C below).
3. There should be no contradiction in the student's schedule.
4. If a student can not register for courses from a higher level for any of these reasons: (schedule contradiction, or not finishing a prerequisites), he can complete his load from the levels which follow that. If he still can not complete his study load, then he studies the available courses even if his study load is less than the minimum load.

C. Minimum Study Load is equal to 12 study units;  
Maximum

Study load is equal to 20 units.

D. The number of levels (higher than the student's present level)

from which a student is allowed to take courses is two.

### **Attendance and Excuse from Study**

The full-time student must attend the lectures and the practical lessons. If the student attends less than 75% of the specified hours

for a course, he must not be permitted either to continue that course or to take its final examination and his final examination mark will be "0".

The student who is not permitted to take the final examination in a course will be given the semester performance marks as his final mark for the course. If a student is absent from the final examination for a compelling reason, the college council, in exceptional circumstances, may accept the student's excuse and permit giving him a substitute examination within a period not exceeding the end of the following semester and the grade he obtains will be registered in his academic record.

A student may be excused from continuing his study in a certain term without being considered a failure if he submits an acceptable excuse to the Dean of College at least five weeks before the final examinations.

The approval of the guardian is a must for a female student who wishes to be excused from continuing her study. The excused student for a term is considered postponing it.

### **Postponement and Suspension from Study**

A student, who wishes to delay his study, may submit an application for that. Upon the consent of the College Council, the student is then excused for a period of not more than two consecutive semesters, or three not consecutive semesters during his stay at the university. After that, any application for delay will result in the cancellation of his registration.

If a student stops study for one term without submitting an application forms for that, his registration at the university will be cancelled.

A visiting student at another university is not considered suspended from his original university.

### **Re-enrollment**

The student who terminates his own registration may re-apply at the university and have his former registration and student number according to these conditions:

- A. If he has applied for re-enrollment within four academic terms since the termination of his enrollment.
- B. If the concerned College Council approves his re-enrollment.
- C. If the student suspends his study for five academic terms or more, he

may re-apply at the university as a new student without referring to his previous record.

- D. Re-registration for the student is done only once.
- E. The student, whose name is on the probation roll, has no right to reregister.
- F. The student, whose registration is cancelled due to educational reason or misconduct either from the university or any other university, will have no right to re-register at the university.

### **Dismissal from University**

A student will be dismissed if:

- A: He gets three consecutive academic warnings due to his low cumulative average (GPA less than 2.0) he may be given a fourth chance to raise his GPA.
- B: He fails to finish his graduation requirements during an extra half the period of time required for his graduation plus the normal period of time needed for graduation by all students.

### **Graduation**

The student graduates after he successfully completes all the

graduation requirements on condition that his cumulative average is not less than (2.0) pass.

### **Examinations and Grades**

#### Definitions:

**Incomplete Grade: (IC):** A symbol representing the temporary grade given to the student for every course he does not complete by the specified date and is registered in his academic record.

**Continuous Grade (M) or (IF):** A symbol representing the temporary grade given for a course that requires more than one semester for its completion. (IF means: in progress)

**Semester Average:** The result of dividing the total of weighed grade points by the total of course units for all the semester courses. The weighed points are obtained by multiplying the value by the number of units in every course.

**Cumulative Average:** The result of dividing the total of weighted grade points by the total of the assigned units for all courses taken by the student from the time of his joining the university.

The Department Board, on recommendation from the instructor of the course, may permit the student to complete any course in the next semester. Incomplete Grade (L) or (IC), for the uncompleted course, is registered in the student's academic record, and only the grade obtained by the student after completion of the course is included in computing the semester average or the cumulative average. If the incomplete grade (L) or (IC) remains in the student's academic record for one whole semester because - e student is unable to complete the course, it is then changed to a fail grade (F), h must be entered into the semester average and the

cumulative average.

Semester Performance Mark: Computed by one of these two ways:

- A. Oral or practical tests, research or other relevant educational activities.
- B. At least two written tests. For a research course longer than one semester, the student is given a continuous grade (IP). The student obtains his grade at completion of the course. If the doesn't complete the course in the specified time, and on recommendation from the Departmental Board, the student may be given an (IC) grade which will be registered in his academic record.

**The grades, which may be obtained by the student in each course, are computed as follows:**

<b>Percent Final mark</b>	<b>General Mark</b>	<b>Grade symbol</b>	<b>Value from 5</b>
95-100	Distinction	A+	5.0
90- Less than 95	Excellent	A	4.75
85 – Less than 90	Above very good	B+	4.50
80- Less than 85	Very Good	B	4.0
75 - Less than 80	Above Good	C+	3.50
70- Less than 75	Good	C	3.0
65 - Less than 70	Fair	D+	2.50
60 - Less than 65	Pass	D	2.0
Less than 60	Failure	F	1.0

The General Grade: The grade obtained by the student at graduation is determined by the cumulative average and of all courses taken by him in-the university.

1- The General Grade is (Distinction) if his cumulative average is

not less than 4.5

- 2- The General Grade is (Very good) if his cumulative average is 3.5 - Less than 4.5.
- 3- The General Grade is (Good) if his cumulative average is 2.75- less than 3.75.
- 4- The General grade is (Pass) if his cumulative average is 2.0- Less than 2.75

The First Class Honors is awarded to the student who attains a cumulative average of 4.75 - 5.0 at graduation; the Second Class Honors to the student who attains a cumulative average of 4.25- Less than 4.75. In either case the award is subject to the following conditions.

The student must not have failed the examination in any course he studied in the university or in any other university.

The student has completed requirements for graduation within a period equal to the average time he is allowed to in his college.

The student has completed 60% of the requirements needed for his graduation at Qassim University.

### **Regulations of the Final Examination**

The student must not be examined in more than two subjects in one day.

The student must not be permitted to enter the final examination half an hour after it has started. Also, he must not be permitted to leave the examination half an hour after it has started.

Any cheating in any examination or attempt at cheating or disobedience of instructions and rules relating to the conduct of examination must be considered break - of -law, subject to the Students Punishment By - Laws.

## **Transferring**

Transfer from University to another University: A student may transfer from university to another university on the approval of the dean of college to which the student wants to transfer in accordance with the following.

- A- The student must be registered at a recognized college or university.
- B- The student must not be dismissed from his first university or college for disciplinary or educational reasons.
- C- Transfer rules should be applicable to the transfer student.

- Once admitted, the transfer student must complete at least 60% of the course units required for a Bachelor Degree at Qassim University in order to graduate.
- The College council equates the courses, which the student had studied outside the university on recommendation from the departments, which offer the same courses. The equated courses will be included as a part of the student's record at Qassim University and will be counted as units towards graduation, but will not be considered when computing the cumulative grade point average.
- The registration of the transfer student will be cancelled if it is found later that he was dismissed for poor academic performance or misconduct.
- The application for transfer from a university to another will be considered at any semester.

**Transfer from College to another within the university:**

- The College Council of the college may honor transfer requests upon the approval of the deans of the two concerned colleges.
- The previous courses of the transfer student will be registered

in the student's file including the grades and the cumulative grade point average.

**Major change within the College:**

- Student may change his major within the college with the approval of the dean of college.
- All previous courses, grades, G.P.A. will be counted and registered in the student's record.

**The Visiting Student**

Definition: Visiting student is the one who studies some courses at another university or at another branch of the same university which he belongs to without transferring to it. The courses he studies there will be equalized to him according to the following regulations:

**First: The student, who belongs to Qassim University** and wishes to study at another university as a visiting student, should abide by the following:

- A- The student must have an academic record with a cumulative average of at least two semesters at the college, which he belongs to before applying for study as a visiting student.
- B- He must have the approval of his original college and the number of courses he is permitted to study at another university. The student is then issued an official permit from the Dean of Admissions and Registration.
- C- Study must be at a recognized college or university.
- D- The course studied outside the university should be equivalent to the course required from the student for graduation.
- E- The maximum academic units allowed to be taken outside Qassim University, counted and registered in the student's file

are 20% of the total academic units requested for graduation at KSU.

- F- The GPA of the equated courses of the visiting student will not be counted when computing the cumulative grade point average.
- G- The student must provide the Dean of Admission and Registration with certified details of the courses he has studied within the first two weeks of the semester that follows his study as a visiting student. If he fails to do this, the results of the courses he has taken will not be accepted. (Exception: the results of courses of Summer Semester).
- H- The monthly award is granted to the visiting student if he deserves it after submitting his results of study to the Dean of Admission and Registration.

**Second: Transfer within Qassim University:**

- A- The student must have studied one academic semester at the college he belongs to prior to applying for transfer as a visiting student.
- B- The student must have the approval of his original college and the permission for the courses he will take as a visiting student. The student is then issued an official letter for transfer from the Dean of Admission and Registration.
- C- The course studied at another college should be equivalent to the course at the student's original college required for graduation.
- D- All the courses taken by the visiting student are counted and recorded in the students file and computed in his GPA.
- E- The maximum academic units to be studied outside the student's college are 20% of the total academic units required for his graduation.

**Requirements for obtaining a bachelor's degree in veterinary medicine:**

For a bachelor's degree in veterinary medicine student must complete the following:

1. Passing 195 credit hours successfully.
2. Passing the General Veterinary Examination with grade 70% at least.

**Note:** English is the language of teaching for specialized courses (VMD), while the language of teaching for other courses is Arabic or English.

**Admission requirements in Program:**

Students are accepted in the Veterinary Department after passing the first level with required GPA determined by the College Board for each semester.

**Proposal of Curriculum**  
**Veterinary Medicine Program**

**General Framework of University Curriculum**

Requirements		Number of Units or Percentage	Percentage	
University Requirements		12 study units	45-50%	
College Requirements	Obligatory	16-30%		
	Elective	4-5%		
Specialization Requirements	Obligatory outside the department	5-10%	45-60%	
	From inside the department	Obligatory		36-40%
		Elective		4-10%
Free courses			3-5%	
Total			100	

## Veterinary Medicine program curriculum

Requirements		Number of Units	Percentage	Total Percentage	
University Requirements		12	6.1	41	
College Requirements	Obligatory	60	30.8		
	Elective	8	4.1		
Specialization Requirements	Obligatory from outside the Department	13	6.7	55.9	
	From inside the department	Obligatory	88		45.1
		Elective	8		4.1
Free Courses		6	3.1	3.1	
Total		195	100	100	

### Courses for awarding Bachelor Degree in Veterinary Medicine:

#### 1. University requirements (12 Credit hours)

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
IC 101	Introduction to Islamic Culture	2	0	0	2	0
IC 102	Islam and the Construction of Society	2	0	0	2	IC 101

IC 103	The Islamic Economic System	2	0	0	2	IC 101
IC 104	Fundamentals of the Islamic Political System	2	0	0	2	IC 101
ARAB 101	Language Skills	2	0	0	2	0
ARAB 103	Expository Writing	2	0	0	2	0
<b>Total</b>		<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

## College Requirements:

### a. Obligatory College Courses (27 credit hours) ( 13.9 % )

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
ZOOL 101	Zoology	3	1	0	4	--
ENG 101	English (1)	3	0	0	3	--
PSYCH 101	Thinking and teaching strategy skills	2	0	0	2	--
MGMT 103	Communication skills	2	0	0	2	--
CHEM 103	General Chemistry	2	1	0	3	--
PHYS 105	Introduction in Physics	2	1	0	3	--
MATH 165	Introduction to the calculus	3	0	0	3	--
AGEC 202	Principles of Agriculture Economics	2	0	0	2	--
STAT 122	Introduction in statistics	1	1	0	2	MATH 165
BCH 301	Principles of Biochemistry	2	1	0	3	CHEM 247
<b>Total</b>		<b>22</b>	<b>5</b>	<b>0</b>	<b>27</b>	

### b. Obligatory College Courses Belonging to Veterinary Medicine (33 credit hours) ( 16.9 % )

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
ENG 103	English language (2)	3	0	0	3	ENG 101
ENG 118	English language	3	0	0	3	ENG 101
VMD 111	Animal Behavior	1	1	0	2	--
VMD 221	Animal Anatomy (1)	2	1	0	3	ZOOL 101
VMD 222	General Histology	2	1	0	3	ZOOL 101
VMD 223	Specific Histology	2	1	0	3	VMD 222
VMD 224	Animal Anatomy (2)	2	1	0	3	VMD 221
VMD 225	Embryology	1	1	0	2	ZOOL 101

VMD 231	Physiology (1)	2	1	0	3	ZOOL 101 CHEM 103
VMD 232	Physiology (2)	2	1	0	3	VMD 231
VMD 333	Endocrinology	1	1	0	2	VMD 232
VMD 341	Introduction to Microbiology	2	1	0	3	BCH 301
<b>Total</b>		<b>23</b>	<b>10</b>	<b>0</b>	<b>33</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

**c. Elective courses (8 credit hours)**

Code and Number of the Course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 348	Molecular biology	1	1	0	2	BCH 301
VMD 349	Tissue culture	1	1	0	2	BCH 301
VMD 496	Wildlife health and management	1	1	0	2	BCH 301
FSNU 313	Food safety	1	1	0	2	BCH 301
FSNU 341	Nutrition and immunity in human	2	0	0	2	BCH 301
FSNU 352	Functional foods	1	1	0	2	BCH 301
PAP 217	Principles of pest control	1	1	0	2	CHEM 103
PAP 218	Agricultural environment and climate changes	1	1	0	2	-
PAP 219	Principles of Biotechnology	1	1	0	2	-
APP 380	Ornamental Animals and Birds Production	1	1	0	2	APP 211
APP 480	Organic animal Production	1	1	0	2	APP 211
APP 381	Animal Farms Technical Management	1	1	0	2	ZOOL 101

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

## 2. Department requirements:

### a. Obligatory courses (88 credit hours)

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 342	Bacteriology and Mycology	2	1	0	3	VMD 341
VMD 343	Immunology	1	1	0	2	BCH 301 VMD 232
VMD 344	Virology	2	1	0	3	VMD 341
VMD 345	Helminthology	2	1	0	3	VMD 222 VMD 231
VMD 346	Arthropodology	1	1	0	2	VMD 222 VMD 231
VMD 347	Protozoology	1	1	0	2	VMD 345
VMD 351	General Pathology	2	1	0	3	VMD 223 VMD 224
VMD 352	Systemic Pathology	3	1	0	4	VMD 351
VMD 413	Application of Computer in Veterinary Medicine	1	1	0	2	STAT 122
VMD 453	Morbid Anatomy	1	1	0	2	VMD 355
VMD 454	Avian Diseases	2	1	0	3	VMD 352
VMD 455	Laboratory Diagnosis	1	2	0	3	VMD 342 VMD 343
VMD 461	Pharmacology	2	1	0	3	BCH 301 VMD 351
VMD 462	Therapeutics	2	1	0	3	VMD 461 VMD 481
VMD 463	Toxicology and Forensic Medicine	2	1	0	3	VMD 461
VMD 471	General Preventive Medicine	2	1	0	3	VMD 342 VMD 344
VMD 472	Applied Preventive Medicine	2	1	0	3	VMD 471
VMD 473	Zoonoses	2	0	0	2	VMD 472 VMD 482
VMD 474	Meat Hygiene	2	1	0	3	VMD 342 VMD 352
VMD 475	Milk Hygiene	1	1	0	2	VMD 342 VMD 471
VMD 476	Field Experience - Food Hygiene	0	0	1	1	VMD 474 VMD 475
VMD 479	Fish hygiene and diseases	1	1	0	2	VMD 342 VMD 352
VMD 481	Clinical Medicine (1)	3	1	0	4	VMD 344 VMD 352
VMD 482	Clinical Medicine (2)	2	1	0	3	VMD 481
VMD 483	Clinical Medicine (3)	2	1	0	3	VMD 482

VMD 484	Field Experience- Clinical Medicine	0	0	1	1	VMD 482
VMD 485	Surgery (1)	3	1	0	4	VMD 482
VMD 486	Surgery (2)	3	1	0	4	VMD 485
VMD 487	Field Experience- Surgery	0	0	1	1	VMD 485
VMD 488	Theriogenology (1)	3	1	0	4	VMD 462
VMD 489	Theriogenology (2)	3	1	0	4	VMD 488
VMD 491	Field Experience- Theriognology	0	0	1	1	VMD 488
VMD 492	Partnership training	0	0	3	3	VMD 455 VMD 482
VMD 498	General Veterinary Exam	0	1	0	1	The student should pass 150 credit hours
<b>Total</b>		<b>53</b>	<b>28</b>	<b>7</b>	<b>88</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

**b. Elective Courses within program (8 Credit Hours)**

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 326	Morbid Surgery	1	1	0	2	VMD 224
VMD 456	Clinical Microbiology	1	1	0	2	VMD 342 VMD 344
VMD 457	Veterinary Vaccines	1	1	0	2	VMD 343 VMD 344
VMD 458	Ornamental Birds Diseases	1	1	0	2	VMD 342 VMD344
VMD 459	Rabbit Diseases	1	1	0	2	VMD 342 VMD 344
VMD 464	Clinical Pharmacology	1	1	0	2	VMD 462
VMD 478	Poultry Meat Hygiene	1	1	0	2	VMD 344 VMD 352
VMD 493	Pet Animals Medicine	1	1	0	2	VMD 344 VMD 352
VMD 494	Pet Animals Surgery	1	1	0	2	VMD 485
VMD 495	Therigenology of Pet Animals	1	1	0	2	VMD 462
VMD 497	Anesthesia of Wild Life	1	1	0	2	VMD 461

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

**C. Obligatory Courses from outside the Department  
(13 credit hours)**

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
APP 211	Principles of Animal Production	2	1	0	3	ZOOL 101
APP 339	Animal Genetics and Breeding	3	1	0	4	ZOOL 101
CHEM 247	Principles of Organic Chemistry	2	1	0	3	CHEM 103
APP 342	Farm Animal Nutrition	2	1	0	3	BCH 103
<b>Total</b>		<b>9</b>	<b>4</b>	<b>0</b>	<b>13</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

**3. Free Courses (6 credit hours)**

## Study Program For Bachelor Degree in Veterinary Medicine (VMD)

### Level 1:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
IC 101	Introduction to Islamic Culture	2	0	0	2	0
ENG 101	English (1)	3	0	0	3	--
PSYC 101	Thinking and teaching strategy skills	2	0	0	2	--
ZOOL 101	Zoology	3	1	0	4	--
ARAB 101	Language Skills	2	0	0	2	0
CHEM 103	General Chemistry	2	1	0	3	--
MATH 165	Introduction to the calculus	3	0	0	3	--
<b>Total</b>		<b>17</b>	<b>2</b>	<b>0</b>	<b>19</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 2:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
IC 102	Islam and the Construction of Society	2	0	0	2	IC 101
ARAB 103	Expository Writing	2	0	0	2	-
PHYS 105	Introduction in Physics	2	1	0	3	--
VMD 111	Animal Behavior	1	1	0	2	--
ENG 103	English language (2)	3	0	0	3	ENG 101

ENG 118	English language	3	0	0	3	ENG 101
STAT 122	Introduction in statistics	1	1	0	2	MATH 165
CHEM 247	Principles of Organic Chemistry	2	1	0	3	CHEM 103
<b>Total</b>		<b>16</b>	<b>4</b>	<b>0</b>	<b>20</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 3:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
IC 103	The Islamic Economic System	2	0	0	2	IC 101
MGMT 103	Communication skills	2	0	0	2	--
APP 211	Principles of Animal Production	2	1	0	3	ZOOL101
VMD 221	Animal Anatomy (1)	2	1	0	3	ZOOL 101
VMD 222	General Histology	2	1	0	3	ZOOL 101
VMD 231	Physiology (1)	2	1	0	3	ZOOL101 CHEM 103
BCH 301	Principles of Biochemistry	2	1	0	3	CHEM 247
<b>Total</b>		<b>14</b>	<b>5</b>	<b>0</b>	<b>19</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 4:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
IC 104	Fundamentals of the Islamic Political System	2	0	0	2	IC 101
VMD 223	Specific Histology	2	1	0	3	VMD 222
VMD 224	Animal Anatomy (2)	2	1	0	3	VMD 221
VMD 225	Embryology	1	1	0	2	ZOOL 101
VMD 232	Physiology (2)	2	1	0	3	VMD 231
APP 339	Animal Genetics and Breeding of	3	1	0	4	ZOOL 101
----	Free course	0	0	0	2	-
<b>Total</b>		<b>12</b>	<b>5</b>	<b>0</b>	<b>19</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 5:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 333	Endocrinology	1	1	0	2	VMD 232
VMD 341	Introduction to Microbiology	2	1	0	3	BCH 301
VMD 343	Immunology	1	1	0	2	BCH 301 VMD 232

VMD 345	Helminthology	2	1	0	3	VMD 222 VMD 231
VMD 346	Arthropodology	1	1	0	2	VMD 222 VMD 231
VMD 351	General Pathology	2	1	0	3	VMD 223 VMD 224
----	Elective college course	0	0	0	2	-
----	Free course	0	0	0	2	-
<b>Total</b>		<b>9</b>	<b>6</b>	<b>0</b>	<b>19</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 6:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
AGEC 202	Principles of Agriculture Economics	2	0	0	2	--
VMD 342	Bacteriology and Mycology	2	1	0	3	VMD 341
VMD 344	Virology	2	1	0	3	VMD 341
VMD 347	Protozoology	1	1	0	2	VMD 345
VMD 352	Systemic Pathology	3	1	0	4	VMD 351
APP 342	Farm Animal Nutrition	2	1	0	3	BCH 103
----	Elective college course	0	0	0	2	-
<b>Total</b>		<b>12</b>	<b>5</b>	<b>0</b>	<b>19</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

## Level 7:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 454	Avian Diseases	2	1	0	3	VMD 352
VMD 461	Pharmacology	2	1	0	3	BCH 301 VMD 351
VMD 471	General Preventive Medicine	2	1	0	3	VMD 342 VMD 344
VMD 474	Meat Hygiene	2	1	0	3	VMD 342 VMD 352
VMD 481	Clinical Medicine (1)	3	1	0	4	VMD 344 VMD 352
----	Elective college course	0	0	0	2	-
----	Elective college course	0	0	0	2	-
<b>Total</b>		<b>12</b>	<b>4</b>	<b>0</b>	<b>20</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

## Level 8:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 413	Application of Computer in Veterinary Medicine	0	1	0	1	STAT 122
VMD 455	Laboratory Diagnosis	1	1	0	2	VMD 342 VMD 343
VMD 462	Therapeutics	2	1	0	3	VMD 461 VMD 481
VMD 472	Applied Preventive Medicine	2	1	0	3	VMD 471

VMD 475	Milk Hygiene	1	1	0	2	VMD 342 VMD 471
VMD 479	Fish hygiene and diseases	1	1	0	2	VMD 342 VMD 352
VMD 482	Clinical Medicine (2)	2	1	0	3	VMD 481
----	Elective department course	1	1	0	2	-
----	Free course	0	0	0	2	-
<b>Total</b>		<b>10</b>	<b>8</b>	<b>0</b>	<b>20</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

### Level 9:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 463	Toxicology and Forensic Medicine	2	1	0	3	VMD 461
VMD 473	Zoonoses	2	0	0	2	VMD 472 VMD 482
VMD 476	Field Experience - Food Hygiene	0	0	1	1	VMD 474 VMD 475
VMD 483	Clinical Medicine (3)	2	1	0	3	VMD 482
VMD 485	Surgery (1)	3	1	0	4	VMD482
VMD 488	Theriogenology (1)	3	1	0	4	VMD 462
VMD 498	General Veterinary Exam	0	1	0	0	The student should pass at least 150 credit hours
----	Elective department course	1	1	0	2	-
<b>Total</b>		<b>13</b>	<b>6</b>	<b>1</b>	<b>20</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determined by 100 minutes.

## Level 10:

Code and Number of the course	Name of the course	Distribution of credit hours				Required courses
		Theoretical	Practical	Training	Credit	
VMD 453	Morbid Anatomy	1	1	0	2	VMD 352
VMD 484	Field Experience- Clinical Medicine	0	0	1	1	VMD 482
VMD 486	Surgery (2)	3	1	0	4	VMD 485
VMD 487	Field Experience- Surgery	0	0	1	1	VMD 485
VMD 489	Theriogenology (2)	3	1	0	4	VMD 488
VMD 491	Field Experience - Theriognology	0	0	1	1	VMD 488
VMD 492	Partnership training	0	0	3	3	VMD 455 VMD 482
----	Elective department course	1	1	0	2	-
----	Elective department course	1	1	0	2	-
<b>Total</b>		<b>9</b>	<b>5</b>	<b>6</b>	<b>20</b>	

1. Each theoretical credit hour is determined by 50 minutes.
2. Each practical / training credit hour is determin

# Program Learning Outcomes (PLOs)

## 1. Knowledge:

- 1.1 Students will be able to list and recognize knowledge related to Veterinary Medicine.
- 1.2 Students will be able to keep pace with advances in Veterinary Medicine.

## 2. Skills:

- 2.1 Students will be able to determine comprehensive methods for diagnosis and treatment of animal and poultry diseases.
- 2.2 Students will be able to apply critical thinking and analytical skills for intervention in surgery and theriogenology.
- 2.3 Students will be able to plan for health promotion, disease prevention and food safety.
- 2.4 Students will be able to demonstrate strong writing and oral communication skills.
- 2.5 Students will be able to demonstrate critical analysis of new information and research findings relevant to Veterinary Medicine.
- 2.6 Students will be able to manipulate veterinary field works using sense and locomotor organs.

## 3. Competences:

- 3.1 Students will be able to work effectively in teams for solving veterinary problems.

3.2 Students will be able to show full awareness of ethical and professional issues relevant to Veterinary Medicine

3.3 Students will be able to make independent and critical assessments.