

SELF EVALUATION REPORT

KAFKAS UNIVERSITY
FACULTY OF VETERINARY
MEDICINE

KARS / TURKEY
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SELF – EVALUATION REPORT

(SER)

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Division of Basic Science: Prof. Dr. Şaban MARAŞLI

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Department of Biochemistry- Prof. Dr. Şaban MARAŞLI

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Department of Histology & Embriology- Prof. Dr. ŞAHİN ASLAN

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Department of Parasitology- Prof. Dr. Atila AKÇA

Department of Microbiology- Prof. Dr. Mitat ŞAHİN

Department of Pharmacology & Toxicology- Prof. Dr. Abdullah DOĞAN

Department of Pathology- Prof. Dr. Serpil DAĞ

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Department of Animal Manage & Economics- Asist. Prof. Dr. EROL AYDIN

Division of Food Safety and Public Health: Assoc. Prof. Dr. Ufuk KAMBER

Department of Food Hygiene and Production- Assoc.Prof.Dr. Leyla VATANSEVER

Department of Public Health- Assoc. Prof. Dr. Nebahat BİLGE

Division of Clinical Science: Prof. Dr. Özgür AKSOY

Department of Surgery- Prof. Dr. Alkan KAMILOĞLU

Department of Internal Medicine- Prof. Dr. Gürbüz GÖKÇE

Department of Obstetrics and Gynecology- Prof. Dr. Cihan KAÇAR

Department of Artificial Insemination- Prof. Dr. Savaş YILDIZ

Department of Wild Animal Disease and Ecology- Not Appointed yet

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INTRODUCTION

Faculty of Veterinary Medicine was founded in Kars in 1982 connected to Atatürk University and begun training–education in 1985. Later, it was connected to Kafkas University that was founded in 1992. The faculty maintains its training-education with an emphasis on the criteria set by EAEVE (European Association of Establishments for Veterinary Education) of which it is a member. Our main objective is to develop and bring up qualified veterinarians on national and international level, and produce solutions to the problems of our region and our country on the subject of livestock breeding. In addition to the classrooms and laboratories in compliance with the requirements of the century, there are research and implementation farm, animal hospital and meat and milk products units in our faculty.

Cooperation is maintained with various veterinary faculties in Europe and United States, but mainly with Caucasasia and Middle Asia within the framework of bilateral agreements. Additionally, within the framework of Academic cooperation protocol signed between our faculty and Azerbaijan Nakhichevan State University Tebietşünaslıq (Veterinary Science) Faculty, it was decided to provide training and education to the students of this faculty by our faculty members in their own faculties and in our units of faculty.

The faculty personnel and students participate in social, cultural and sportive activities in the clubs within the body of our University. Students of the veterinary faculty graduate with the diploma of “Doctor of Veterinary Medicine.” Our graduates can work as independent veterinarians and are able to find employment opportunities in many private and state operations and organizations and research institutes, municipalities together with Ministries of Food, Agriculture and Livestock, Forestry and Water Affairs and Health.

The faculty academically has five divisions; Basic Science, Preclinical Science, Clinical Science, Animal Husbandry and Nutrition Science and Food Safety and Public Health with 20 departments distributed in these division as given on page 3. The faculty operates on five premises; a three-block building where administrative bodies, classrooms and laboratories are present, teaching hospital, farm including large animal and poultry shed and milking parlour, a small scale slaughterhouse and a production unit for milk product.

The curriculum was revised in line with requirements of the region and accredited faculties and implemented for student admitted in the academic year 2013-2014 and prospective students.

1. OBJECTIVES

1.1. FACTUAL INFORMATION

The mission of the Faculty is to educate student as a veterinarian that has knowledge of modern trends and developments in veterinary science, to ensure this to provide high quality training, research and publishing in veterinary science level of undergraduates and postgraduates. At the same time to do research and/or work on animal husbandry, artificial insemination, food science, clinical science, laboratory diagnostic services, animal nutrition and nutritional diseases, usage of veterinary drugs, protection of ecological systems. As a results of this, research or/and work, to help social and economic development of the region and the country.

At the end of each year, the dean designates its official targets and annual activity report in collaboration with the 'Faculty Council' and submits them in a report to the university administration. The rector along with executive board and the senate of the university evaluates, revises and follows up these targets.

1.2. COMMENTS

The objectives are realistic and based on annual demands and the faculty tries its best to achieve these goals despite financial shortages.

The strengths of the Faculty of Veterinary Medicine are as follows:

1. Large number of well-educated teaching staff
2. Relatively young academic staff
3. A number of academic staff educated abroad
4. High animal population, especially large animals, in the area.
5. Revised curriculum, according to European Veterinary Faculties
6. Very reach natural habitat.
7. Increased inter-university and international cooperation

Weaknesses:

1. Insufficient financing by the state
2. Inadequate research funds
3. Unsatisfactory number of administrative and support staff
4. Small number of paid research assistant
5. Harsh climate in the area
8. Location in less-developed area

1.3. SUGGESTIONS

Faculty hospital and pathology departments need to operate in new separate buildings.

The numbers of administrative and support staff have to be increased. But, the allocation of those personnel is determined by the government.

A transport to sport and social facilities existing on the other part of the campus should be organised.

Academic staff should be encouraged take part in international and national projects in order to supply more research and teaching equipment to the university.

2. ORGANISATION

2.1. FACTUAL INFORMATION

Name of the Establishment	: Kafkas University Faculty of Veterinary Medicine
Address	: Kafkas University, Faculty of Veterinary Medicine, 36100, Paşaçayırı, KARS- TURKEY
Telephone	: +90 474 242 68 39
Fax	: +90 474 242 68 53
Website	: http://www.veterinary.kafkas.edu.tr
E- mail	: vetdekan36@gmail.com
Title and name of head of the Faculty:	Dean, Prof. Dr. Gürsoy Aksoy

Address of the University:

Faculty of Veterinary Medicine of Kafkas University is located on main campus of Kafkas University. Administrative office is also located on the campus. The address of rector's office as follows;

Rector of Kafkas University
Kafkas University,
Campus, 36100, KARS/TURKEY

Details of the competent authority overseeing the Faculty:

Rector

The University is led by Rector, who is assisted by three vice-Rectors. The academic bodies of the University based on the Law are the Senate and the Executive Board. The main decision-making bodies of the Faculty are the Faculty Board, the Executive Board and the Dean.

All universities are governed by the rule and regulations determined by the Higher Educational Council (YOK) in Turkey. Candidates for rector position are determined by the votes of academic staffs of university. Names of six candidates who had the highest votes are

submitted to the YOK for an interview. After the interview, three names out of six candidates are determined by the YOK and submitted to the president of Turkey. Then, the president of Turkey appoints one of these candidates for a period of 4 years. The rector can be re-elected and re-appointed for another period but appointment cannot be beyond eight years.

Rector selects up to three vice rectors among the professors working as a tenured appointment (full-time salaried). Vice Rectors are appointed for four years by the rector.

Duties, authority and responsibilities of Rector:

To lead university executive board and senate, to implement decisions taken by the Higher Education Council, to examine and decide about the propositions of the university boards and to co-ordinate operations among the organisations connected to the university.

- At the end of each term and when the need arises, to inform the inter-university Board about educational, scientific research and publication activities of the university
- To prepare the investment programmes, budget and employment needs of the university according to suggestions by the executive board and the senate of the university and to inform the Higher Education Council about it.
- In necessary cases, reassign academic and other staff and assign them new jobs.
- To supervise university divisions and all staff
- To carry out all responsibilities invested to him by this law.

Senate

Senate consists of rectors as the chairperson, deputy rectors, deans, a member from each faculty elected by the faculty board, the directors of institutes, vocational high school and collages. Senate assembles at least twice a year; at the beginning and end of each academic year. Rector invites the senate for a meeting whenever need arises.

Senate is an academic body of the university and has the following duties:

1. To decide about educational, scientific research and publication activities,
2. To prepare draft instruction and rules about the university
3. To examine and to decide about the educational schedule and calendar of the university.

4. To finalise the decisions of the faculty executive board
6. To examine and finalise objections to the decisions of the faculties', institutes' and collages' connected to the university
7. To select members of the executive board of the university,
8. To carry out other responsibilities given by law.

University Executive Board

University Executive Board is composed of rector as the chairperson, deans and three professors elected by senate for four years to represent different educational divisions and areas connected to university. Rector invites the University Executive Board to meet whenever it is necessary. Vice rectors can join the meeting without voting rights.

University Executive Board is a support department to rector in administrative issues and has the following duties:

1. To help rector in the direction of decisions of the senate and higher education organisations.
2. To provide applications of action plan and programs: considering suggestions of departments connected the university, to examine investment programs, draft budgets and to submit them to rectorate together with their proposals.
3. To decide about administrative issues suggested by the rector
4. To examine and finalise objections to the decisions of Executive Board of the faculty, institute and collage.
5. To carry out other responsibilities given by law.

Dean

Dean represents faculty and its departments. The Higher Education Council selects Dean for three years among the three salaried professors suggested by the rector. The assignment is done by the normal method. Dean can be reassigned one more tie after the termination of his/her first assignment period. Dean selects up to two academic staff as vice dean. Dean assigns vice deans for at most three years.

Duties: Authority and responsibilities

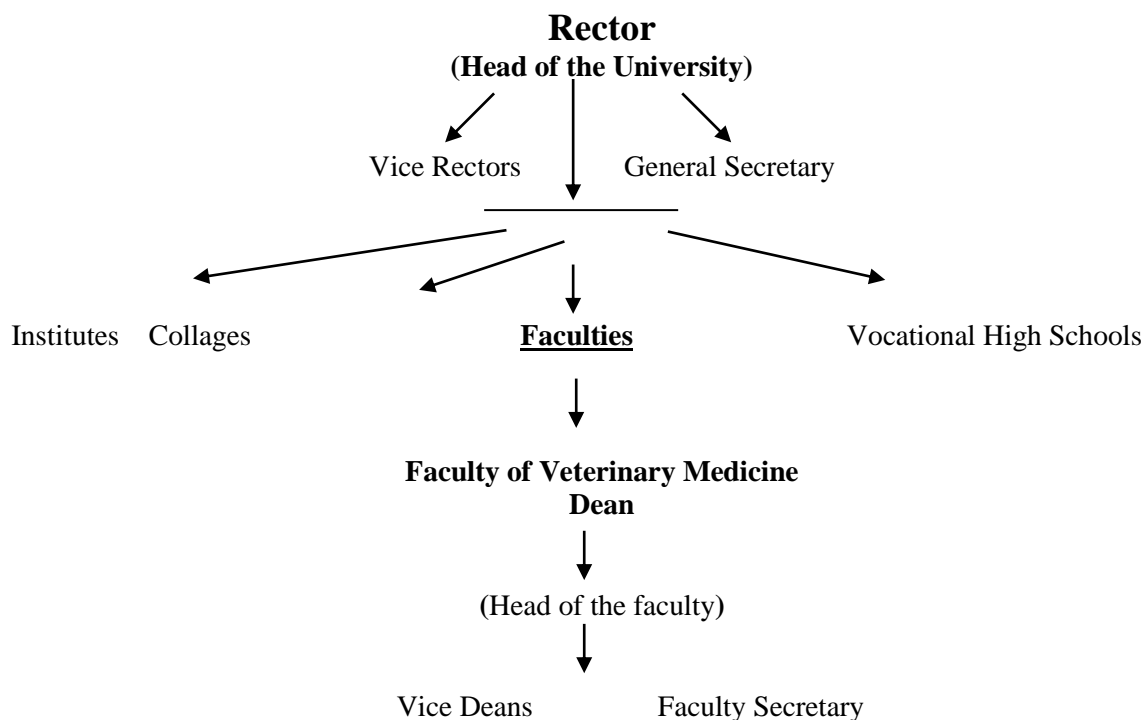
1. To take chair in faculty boards, to apply decisions of faculty boards and to co-ordinate among faculty departments

2. To report the rector about the operation and general situation of faculty at the end of each year and when requested.
3. To inform the rectorate about needs of allowance and employment, to submit the suggestion about the budget of the faculty after the opinion of the executive committee of the faculty is taken into consideration.
4. To supervise the faculty units and staff of all levels.
5. To carry out other responsibilities invested in it by this law.

Faculty Board

Establishment and functions: Faculty Board composes of dean as the chairperson, heads of faculty units, two professors elected among professors by themselves, two associate professors elected among associate professors by themselves and, one assistant professor elected by assistant professors for three years.

Higher Educational Council



Divisions (5)
(Heads of Divisions)

Basic Sciences	Pre Clinical Sciences	Clinical Sciences	Animal Husbandry and Nutrition	Food Safety and Public Health
Departments (5)	Departments (5)	Departments (5)	Departments (3)	Departments (2)
Head of Departments	Head of Departments	Head of Departments	Head of Departments	Head of Departments

() Number of division or department

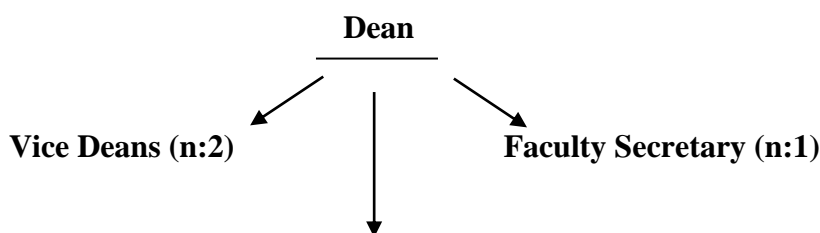
Divisions

<p style="text-align: center;">Basic Sciences</p> <ol style="list-style-type: none"> 1. Department of Histology and Embryology 2. Department of Anatomy 3. Department of Physiology 4. Department of Biochemistry 5. Department of History of Veterinary Medicine and Deontology 	<p style="text-align: center;">Pre Clinical Sciences</p> <ol style="list-style-type: none"> 1. Department of Pharmacology and Toxicology 2. Department of Microbiology 3. Department of Parasitology 4. Department of Pathology 5. Department of Virology
<p style="text-align: center;">Clinical Sciences</p> <ol style="list-style-type: none"> 1. Department of Surgery 2. Department of Internal Medicine 3. Department of Obstetrics and Gynaecology 4. Department of Reproduction and Artificial Insemination 5. Department of Wild Animal Diseases and Ecology 	<p style="text-align: center;">Animal Husbandry and Nutrition</p> <ol style="list-style-type: none"> 1. Department of Animal Husbandry 2. Department of Animal Nutrition and Nutritional Diseases 3. Department of Livestock Economics and Management
<p style="text-align: center;">Food Safety and Public Health</p> <ol style="list-style-type: none"> 1. Department of Food Hygiene and Production 2. Department of Public Health 	

Rules of Appointments

Dean: Appointed for three years by the Turkish Higher Educational Council among 3 candidates proposed by the rector.

Administrative Structure of the Faculty



Faculty Executive Board	Faculty Board
Professor Representatives (n:3)	Heads of the Divisions (n:5)
Associate Prof. Representatives (n:2)	Professor Representatives (n:3)
Assistant Prof. Representative (n:1)	Associate Prof. Representatives (n:2)
	Assistant Prof. Representative (n:1)

Vice Deans: Appointed by the dean among the academic staff for a maximum three year.

Faculty Board: The heads of divisions are natural members of this board presided over by the dean. Professors elect three professor members, Associate Professors elect two Associate Professors members and Assistant Professors elect one Assistant Professors member for board.

Faculty Executive Board: Faculty council appoint three Professors, two Associate Prof., and one Assistant Prof. for this council.

Head of Divisions and Departments: Heads of the divisions are appointed by the dean. In doing so, the dean considers the opinions of the members of the related departments. Head of departments are elected by the academic staff of that department.

Responsibilities

Dean is the key person responsible for the financial and administrative matters. Dean also coordinates research and educational activities in the faculty, leads the faculty board; coordinates the relations among the departments, determines the faculty's needs and informs the rectorate.

Faculty Board is responsible for the education. The board meets at the beginning and end of each semester to establish the academic schedule and to plan educational activity.

Faculty Executive Board is chiefly responsible for administration. The members meet weekly and discuss such issues as staff, finance, education and research.

2.2. COMMENTS

In all the universities throughout the country, the administrative construction of faculties is performed according to the rules of the Turkish Higher Education Council.

3. FINANCES

3.1. FACTUAL INFORMATION

3.1.1. General Information

Universities and Faculties in Turkey are state establishments. Ministry of Finance allocates necessary financial fund to directly faculty for salaries (for academic, teaching and administrative staff), consumables, electricity, telephone, cleaning, stationary, equipment and maintenance of building etc. Total sum of this funds for the last three years can be seen Table 3.1. Total sum of the last 3 years research grants can also be seen Table 3.1. Faculty has no fund for research but Coordinator for Scientific Research Projects of the University provides funds for research projects. Research projects can also be receive supports from governmental and non-governmental bodies.

If the funds by Ministry of Finance is not enough (generally this is the case), necessary amounts would be drawn from the general budget of the university with the approval of the rector in order to provide major teaching equipment and consumables. The Faculty Executive Board and dean decide how to and what for spend this money.

3.1.2. Information on Extra Income

Income of our faculty obtained mainly from central government.

3.1.3. Overview Income (Revenue) and Expenditure

Table 3.1: Income/Revenue (TL, Turkish currency)

	Government	Income generated by the faculty			
Year	Direct to Faculty	Clinical support	Farm support	Research Fund	TOTAL
2015	10.758.400	39.683,50	318.070,13	1.375.000	12.541.153,63
2014	9.531.000	52.650,00	347.738,76	285.000	10.216.388,76
2013	9.166.100	45.927,00	156.737,65	225.000	9.593.764,65

Table 3.2: Expenditure

	Pay	Non Pay				
Year	Salaries	Teaching support	Clinical support	Farm support	Staff health expenses	TOTAL
2015	8.408.152,01	201.192,13	32.797,01	117.215,20	1.085.492,22	9.844.848,57
2014	7.173.530,41	186.305,35	28.543,58	250.115,83	1.006.405,41	8.644.900,58
2013	6.734.815,42	190.651,58	60.395,14	261.886,52	932.014,47	8.179.763,13

3.2 COMMENTS

Unfortunately the faculty has not got enough finance, it will never be enough. Veterinary training does not receive a large budget compared to other disciplines. Because, the government decides on the staff salaries there are no differences between different disciplines or faculties trough out the country. Because of the geographic position of Kafkas University, the academic staffs receive more salary than that of the other universities. In addition, if the academic staff gives more than 10 h lecture in a week, she/he gets extra teaching money.

The university's funds for research are not enough. The faculty tries its best to give better education for veterinary students.

3.3. SUGGESTIONS

The overall financial resources of the faculty are not sufficient. It is necessary to create new resources.

4. CURRICULUM

4.1 FACTUAL INFORMATION

The revised and approved curriculum (30 ECTS per semester) has just started to operate in the academic year 2013-2014 with the first year students. The 9th semesters besides the mandatory training to be related to the different branches course. The 10th semesters is totally devoted to clinical and practical education with more emphasis on “hands on” practical training. In order to commence the final year training, one should have completed the given courses and extramural practice.

Students having lessons according to old curriculum will be graduated in a two year time. Presented information in this chapter is about new curriculum. New curriculum and course contents can be seen in Tables 4.1-4.4. listed below.

4.1.1. Power of subjects and types of training

4.1.1.1. Power of subject

- a) The “core” subjects taken by every student are given in Table 4.2. and Table 4.4
- b) The “electives” subjects list is given in Table 4.3.
- c) Obligatory extramural work details are given 4.1.5 and Table 4.5

4.1.1.2. Types of training

4.1.1.2.1. Theoretical training

Theoretical training carries on as lectures.

4.1.1.2.2. Supervised practical training

Supervised practical training is carried on as laboratory and desk based work, non-clinical animal work and clinical work.

4.1.2. Undergraduate curriculum followed by all students

4.1.2.1. Curriculum hours

Table 4.1: General table of curriculum hours taken by all students

Year	Hours of training							
	Theoretical training		Self directed learning	Supervised practical training			Other	Total
	Lectures	Seminars		Laboratory and desk based work (D)	Non-clinical animal work (E)	Clinical work (F)		
(A)	(B)	(C)	(D)	(E)	(F)	(G)		
First	392	Na	Na	140	112	-	-	644
Second	462	Na	Na	308	28	-	-	798
Third	504	Na	Na	156	84	140	-	884
Fourth	476	Na	Na	70	56	224	-	826
Fifth	476	24	Na	168	80	380	-	1128
Total	2310	24		842	360	744		4280

Table 4.2 Curriculum hours in EU-listed subjects taken by each student

Subjects	Theoretical training		Self Directed learning	Supervised practical training			Other	Total
	Lectures	Seminars		Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B	C	D	E	F	G	
1. Basic Subjects								
a) Physics (medical)	14			-				14
b) Chemistry (medical)	28			28				56
c) Biology (medical)	14			28				42
<i>1- Total number of hours</i>	56			56				112

Table4.2 Curriculum hours in EU-listed subjects taken by each student

Subjects	Theoretical training		Self directed learning	Supervised practical training			Other	Total
	Lectures	Seminars		Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B	C	D	E	F	G	
2. Basic Sciences								
a) Anatomy	98				140			238
b). Histology and Embryology	84			56				140
c) Physiology	70			56				126
d) Biochemistry, cellular and molecular biology	84			56				140
e) Pharmacology and pharmacy	56			56				112
f) Toxicology (inc. environmental pollution)	28			28				56
g) Microbiology (inc. virology, bacteriology and mycology, avian diseases)	126			70				196
h) Immunology	28							28
i) Epidemiology (inc. scientific and technical information and documentation methods)	14							14
j) Latin (Veterinary Terminology)	14							14
k) Genetics (including molecular genetics)	28							28
l) Prescription Information	14							14
m) Veterinary History	14							14
2- Total number of hours	686			322	140			1148
3. Clinical Sciences								
a) Obstetrics, Reproduction and Reproductive disorders	98					232		330
b) Pathology including pathological anatomy	112			84	28			224
c) Pathophysiology	14							14
d) Parasitology	84			112				196
e) Clinical medicine (clinical lectures on various domestic animal, poultry and other animal species)	140			28		328		496
f) Surgery (including anaesthetics and foot diseases)	154					236		390
g) Internal diseases	126					208		334
h) Diagnostic imaging (including radiology)	14							14
i) Veterinary state medicine	14							14
j) Forensic veterinary medicine	14							14
k) Propaedeutics (including laboratory diagnostic methods)				88				88
3- Total Number of Hours	770			312	28	1004		2114

Subjects	Theoretical training		Self directed learning	Supervised practical training			Other	Total
	Lectures	Seminars		Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B	C	D	E	F	G	
4. Animal Production								
a) Animal Nutrition (including Animal nutrition and nutritional diseases)	56			-	56			112
b) Agronomy	14							14
c) Livestock Economics	28							28
d) Animal Husbandry	56				56			112
e) Animal welfare	14							14
f) Animal Behavior	14							14
g) Animal Breeding	28							28
h) Bee keeping and diseases	14							14
i) Water products and their technologies	14							14
<i>4- Total Number of Hours</i>	238				112			350
5. Food Hygiene / Public Health								
a) Inspection and control of animal foodstuffs or foodstuffs of animal origin and the respective feedstuff production unit	56				56			56
b) Food hygiene and technology	28			28				56
c) Veterinary public health	28							56
d) Practical Work (including practical work in places where slaughtering and processing of foodstuffs takes place)					56			56
<i>5- Total Number of Hours</i>	112			28	112			256
6. Professional Knowledge								
a) Professional ethics and deontology	14							14
b) Veterinary legislation	14							14
<i>6- Total Number of Hours</i>	28							28

Table 4.3: Curriculum hours in EU-listed subjects offered and to be taken as electives

Subjects	Theoretical training		Self directed learning	Supervised practical training			Oth-er	Total
	Lectures	Se-mi-nar-s		Laboratory and desk based work	Non-clinical animal work	Clinical training		
Basic Subjects	A	B	C	D	E	F	G	
Gymnastics (only first year)	28							28
Computing	14			14				28
Entrepreneurship	14							14
Professional English	56							56
Basic sciences								
Basic biochemical techniques and their applications in biotechnology	14							14
Bacterial vaccines and immunoprophylaxis	14							14
Exercise physiology	14							14
Dissection and exenteration	14				14			28
Scientific research techniques	14							14
Mycology	14							14
Viral zoonoses	14							14
Use of biotechnology in microbiology	14							14
Viral Vaccines	14							14
Stem cell techniques	14							14
Microscopy Information and techniques	14							14
Control program of parasitic diseases	14							14
Biosecurity	14							14
Cases physiology	14							14
Bacterial zoonoses	14							14
Ecology and environmental toxicology	14							14
Digestive system pathophysiology	14							14
Parasitic zoonoses	14							14
Vectors and control	14							14
Clinical sciences								
Energy metabolism in ruminant	14							14
Neonatal diseases	14							14
Oncology	14							14
Imaging techniques in obstetrics and gynaecology	14							14
Animal production								
Laboratory animals and diseases	14							14
Animal health economics	14							14
Animal shelter and hygiene	14							14
Feed quality control	14							14

Biotechnology in animal nutrition	14							14
Geese and ducks breeding	14							14
Professional Knowledge								
Animal rights	14							14
Veterinary medicine and public relation	14							14
Career planning and opportunities	14							14

Table 4.3.1: Curriculum hours 9th semesters to be taken as electives

Subjects	Theoretical training		Self directed learning C	Supervised practical training			Other G	Total
	Lectures	Seminars		Laboratory and desk based work	Non-clinical animal work	Clinical training		
	A	B		D	E	F		
Livestock medicine and breeding								
Clinical Biochemistry	28			14				42
First Aid in Veterinary Medicine	14				14			28
Udder health and diseases	14				14			28
Sperm production technologies	14				14			28
Livestock breeding	28				14			42
Farm management	14							14
Ruminants internal medicine	28				14			42
Horses internal medicine	28				14			42
Herd health and management	28				14			42
Livestock feed and nutrition disorders	28				14			42
Ruminant surgery	28				14			42
Horse surgery	28				14			42
Porcine feed and nutrition disorders	14				14			28
Livestock control program	14							14
Parasitic diseases of livestock	14							14
<i>Total Number of Hours</i>	322			14	154			490

Small Animal Medicine and Breeding							
Clinical Biochemistry	28			14			42
First Aid in Veterinary Medicine	14				14		28
Exotic animal diseases	28						28
Dental and oral health	14			14			28
Small animals behavioral disorders	14						14
Small animals feed and nutrition disorders	14				14		28
Small animals surgery	28				14		42
Eye diseases	14						14
Internal medicine small animals	28				14		42
Cat and dog breeding	28						28
Cat and dog oncology	14				14		28
Dermatology	14						14
Cat and dog parasitic diseases	14						14
Cat and dog reproduction and artificial insemination	14				14		28
Cat and dog obstetrics and gynaecology	14				14		28
Total Number of Hours	294			28	98		420
Food Safety and Public Health							
Forward hygiene and technology of meat and meat products	28			14			42
Forward hygiene and technology of milk and milk products	28			14			42
Food chemistry	14			14			28
Food microbiology	28			14			42
Poultry products, hygiene and technology	28			14			42
Water and water products hygiene and technology	28						28
Food safety and control	28			14			42
Histological examinations of meat and meat products	14			14			28
Total Number of Hours	196			98			294
Poultry Medicine and Breeding							
Poultry anatomy	14				14		28
Poultry histology	14			14			28
Poultry physiology	14			14			28
Diagnosis and prevention of infections in poultry	28						28
Poultry diseases pathology	28			14			42
Poultry parasitic diseases	14						14

Alternative avian breeding	14							14
Broiler breeding	28				14			42
Laying hens breeding	28				14			42
Poultry feed and nutrition disorders	14			14				28
Cluster management	14							14
Poultry surgery	14				14			28
Poultry products and technology	14				14			28
Total Number of Hours	238			56	70			336

Table 4.4: Curriculum hours in subjects not listed in Table 4.2 to be taken by each student, including Diploma work (final graduation thesis, or final graduation work).

Subjects	Theoretical training			Supervised practical training				Total
	Lectures	Seminars	Self directed learning	Laboratory and desk based work	Non-clinical animal work	Clinical training	Other	
	A	B	C	D	E	F	G	
Basic Subjects								
Turkish literature	28							28
Atatürk's Principles and History of Revolution	28							28
Foreign Language (English)	28							28
Basic Sciences								
Biostatistics	14			28				42
<i>Total Number of Hours</i>	98			28				126

4.1.3 Ratios

$$\frac{\text{Theoretical training}}{\text{Supervised practical training}} = \frac{2334}{842+360+744} = 1.199$$

$$\frac{\text{Clinical Work}}{\text{Laboratory and desk based work} + \text{Non clinical animal work}} = \frac{842}{360+744} = 0.763$$

$$\frac{\text{Clinical Work}}{\text{Laboratory and desk based work} + \text{Non clinical animal work}} = \frac{842}{360+744} = 0.763$$

Non clinical animal work

4.1.4 Further information on the curriculum

Each semester students must take at least one elective subject according to their program.

In the 5th grade, first semester (9th semester) there is five lectures (Veterinary legislation, Veterinary Public Health, Professional Ethics and Deontology, Prescription Information, Forensic Veterinary Medicine), clinic and seminar taken by each student. In the second semester (10th semester) all students are divided in 7 groups and 280 h theoretical and 280 h practical training in the following subjects: Internal Medicine, Surgery, Obstetrics and Gynaecology, Reproduction and Artificial Insemination, Animal Husbandry, Animal Nutrition and Nutritional Diseases, Food Hygiene and Production, Diagnostic Laboratory Methods, Livestock Economics and Management.

Students can participate in the inspection, diagnosis, operation and postoperative care of the patients under the supervision of a responsible lecturer. This group also cares for hospitalised patients.

Mobile clinic services are given when there is a need. Students being at the clinic when the call received can take part in this activity. There is not a special time for mobile clinic service.

4.1.5 Obligatory extramural work

It is obligatory for each student to complete a-30-working day course in extramural practice (15-working day course in first extramural practice after the sixth semester and -15-working day course in second extramural practice after the eighth semester). The institution where this practice is to be done is determined by the Faculty Administrative Council (see Table 4.5).

The responsible person of the institution giving extramural practice fills the student practice booklet. If this practice is performed in a private company, responsible veterinarian fills the booklet. Students may do their extramural practice in an institution approved by the university in a foreign country. The duration of that practice is the same as it would be in Turkey. Those who have been excused from their extramural practice due to various reasons are given a new opportunity the following year.

Table 4.5. Obligatory extramural work that students must undertake as part of their course

Nature of Work		Minimum period (hour)	Year of the course in which work is carried out
First extramural practice	<ul style="list-style-type: none"> - Research and Application Farm of the Faculty of Veterinary Medicine - Food, Agriculture and Livestock Ministry of institutions and organizations - Institutions and organizations related to the Ministry of Environment and Urban Planning - TUBITAK - Feed mills - Pharmaceutical factories - Integrated meat and dairies - Fish farming and integrated facilities - Bee keeping Institute and integrated facilities - On-site slaughterhouse with municipal animal shelters or veterinary offices - Faculty Internship Committee of the private livestock operations be approved by the Faculty Board 's recommendation 	120	End of 3 th year
Second extramural practice	<ul style="list-style-type: none"> - Private animal hospitals with at least 5 years of professional experience and adequate equipment with free veterinarian clinics - Surgery of the Faculty of Veterinary Medicine , Internal Medicine and Obstetrics and Gynecology clinics 	120	End of 4 th year

4.1.5. Specific Information on the Practical Training of Food Hygiene

Food hygiene and control course is taught during the first semester of 4th grade. The course has got 28 hours of practical training which involves microbiological and chemical analysis of food samples.

Meat hygiene, inspection and technology course is taught during the second semester of the 4th grade. The course has got 28 hours of practical training. The faculty slaughterhouse and municipal slaughterhouse used for educational purposes. This slaughterhouse is in the campus. According to a previously arranged timetable, small and / or large (sheep, cattle) animals from the faculty's farm are slaughtered. Students carry out the ante mortem and post mortem inspections by themselves.

Milk hygiene and technology course is also taught during the second semester of the 4th grade. Practical course is arranged as a lab base work and also small groups of students visit pilot milk products production unit on the campus and in industrial site of Kars.

4.2. COMMENTS

The revised and approved curriculum (30 ECTS per semester) has just started to operate in the academic year 2013-2014 with the first year students. Consequently, we are not able to analyze correctly its weak and strong points.

5. TEACHING AND LEARNING: QUALITY AND EVALUATION

5.1. FACTUAL INFORMATION

5.1.1. The Teaching Program

Establishment of a course is decided by the Faculty council. The lecturers prepare notes and working material for students that are published by the faculty or other universities. There is not a set rule of preparing this educational material, and each department has its own way of doing so. The lecturers decide which notes student will be following and the way of teaching techniques. Each departments prepare handouts for each courses and distribute to the students and they follow these handouts or classical textbooks. Generally, theoretical lectures are given as a power point. For all cases, practical training is important. Staff survey and student questionnaires support the issues.

5.1.2. The Teaching Environment

The system expressed in this section does not exist in our faculty.

5.1.3. The Examination System

The academic calendar that is published in the annual academic guide shows the beginning and end of the academic year, semesters, examination sessions, and holidays. All the exam dates of each course are decided by the faculty council in advance.

- During each of two semesters, taking 14 weeks in the academic year, there are three examination sessions as mid-term, final and make-up exams. Mid-term exams take place while teaching continues. Students have to take the final exam at the end of the each semester followed by the make-up examination after two weeks. If students fail to turn up for the make-up exam on the chosen day, the lecturer records it as ‘no-show’ in the examination sheet. The entry ‘no-show’ equals failure. In the case of a no-show because of a valid reason the entry ‘no-show’ is cancelled if proof of a valid reason is submitted. In this situation that student takes an extra exam.
- Departments are entitled to choose the type of examination to be made (oral, written, practical, multiple-choice questions, clinical examination, continuous assessment or all) provided the decision is confirmed by the faculty council.

- In calculating students' grades, 40 % mid-term examination grades and 60 % of the final or make-up examination grades are considered. Students are successful if lecture success grades are 60 and above (CC and above, 2.00 and above).

-

5.1.4. Evaluation of Teaching and Learning

There is no system whereby the quality of teaching can be evaluated. Simply we take credit of number of passing students and their exam marks. The role of students in the evaluation of teaching and teachers is obtained by questionnaires.

5.1.5. Student Welfare

There is a student dining hall, student canteens (one in main building one in the hospital) in the campus. The university also provides different club activities such as biology, climbing and tracking, bird watching and horse riding etc.

During the examination of the animals, students must be given gloves against any infectious disease. In the clinic, all safety measures are under supervision, for example animal behavior, kicking, biting etc. There are all kinds of safety measures for laboratories such as eye protectors, mask, antiseptics and disinfectants. Biosanitary is a very important issue for zoonotic diseases; therefore, there are large safety procedures for clinics, pathology, microbiology and virology. The medical faculty is in the campus.

One of the vice dean's responsibility is to cope with student's problems, if it is possible. Furthermore, the each academic staff is a guidance counselor for each of the 15 students group in order to solve academic problems as well as give an advice for future career development or job selection. However, the faculty has not got a professional guidance counselor.

5.2. COMMENTS

In spite of the fact that there is a committee dealing with educational matters in the faculty, an effective co-ordination among the departments as to the contents of courses can not be achieved. Sufficient notes of courses are made available to students. There is no co-operation with companies from outside the faculty for educational purposes.

More social and cultural events should be organized and more social facilities should be established to increase the student welfare.

5.3. SUGGESTIONS

All the teaching staff should be trained pedagogically. Oral examinations must be carried out in the clinical departments with the participation of staff from other faculties.

In addition to their compulsory apprenticeship, students should also be helped and encouraged to find work in various companies and institutions where they can put their theoretical knowledge into practice. Students should all be able to make use of such an opportunity during the whole period of his/her education.

The interdisciplinary syllabus should be arranged in such a manner that certain lessons may be taught simultaneously without unnecessary repetitions. The performance of the educational staff should be evaluated by a professional organization from outside the university and an award system should be established.

6. FACILITIES AND EQUIPMENT

6.1. FACTUAL INFORMATION

6.1.1. Premises in General

Kafkas University, Faculty of Veterinary Medicine is situated on an area of about 270 hectares.

The First Building: It is located on 4,526.00 m². This building is used as an administration building of the faculty.

The Second Building: It is located on 9,249.00 m². Fourteen Departments and administration office of faculty are located in this 3-stories high building. Inside this building there are: 4 amphitheatres equipped with a close circuit TV system, holding 99 student each; 2 classrooms holding 50 student each; 7 student laboratories holding 15 students each; 18 research laboratories; 1 study and reading room; 1 student canteen; 1 student dining hall; 1 autopsy hall;

The Third Building: It is located on 3,016.00 m². Department of Anatomy, Histology and Embryology, Anatomy student hall, Central Research Laboratories and Institute of Medical Science, 2 classrooms holding 50 students are located in this 4-stories high building. Department of Histology and Embryology has got 4 research laboratories (2 of them active), 1 student laboratory, 1 student computer room; and 1 lecture room (not active).

The Fourth Building (Teaching Hospital): It is located on 2,189.00 m². In this building there are departments of Surgery, Internal Medicine, Obstetrics and Gynaecology, Reproduction and Artificial Insemination, animal hospitalisation rooms, 4 operating theatres of surgery 2 for small animals 2 for large animals, 4 consulting room 2 for small animals 2 for large animals, X-ray unit, ultrasound unit, faculty pharmacy, 1 diagnostic and 2 research laboratory for reproduction, sterilisation room, a lecture hall holding 100 students, Canteen for student and academic staff, rooms of academic staff.

The Fifth Building (Pilot slaughterhouse and Dairy plant): It is located on 857.00 m². Pilot slaughterhouse operates when needed for educational purpose. Dairy plant has a capacity of 1 ton milk per day where cheese and yoghurt are produced.

Building of Faculty Farm: There is an education and research farm within the campus of the faculty. It has separate sheds for cattle, sheep, goat, poultry (hen, goose, quills and bee). See 6.1.3.

6.1.2. Premises Used for Clinics and Hospitalization

Table 6.1.1: Places available for hospitalization and animals to be accommodated

	Species	No. places
Regular Hospitalization	Cattle	4
	Horses	2
	Small ruminants	4
	pigs	-
	Dogs	1
	Cats	1
	Other	-
	Isolation facilities*	Farm animals and horses
Small animals		1
Other		-

*. Isolation unit is used for wild animal rehabilitation

6.1.3. Premises for Animals

Building of Faculty Farm: The farm is about 230 hectares and placed at 300 m away from the faculty. In this area, cattle, sheep, goat, geese, quail and bee are raised for research and educational purpose.

The farm was equipped with necessary equipment so that it produce its own feedstuff.

The Sixth Building: It is located on 1256.792 m². This shed has three separate parts; in one part small farm animals are kept and has one barn and one feed lot, in second part poultry is kept and in the third part horses are kept.

The Seventh Building: It is located on 848.4 m². It is used to keep large farm animals (mainly cow) and contains 3 barns and two feed lots.

The Eight Building: This also designed for milking cows and has a capacity of 250 heads and milking parlour.

The Ninth Building: This is around 200 m² and designed to raise goose.

On the same area there exists a Laboratory Animal Unit and Wild Animal Treatment and Rehabilitation Centre which was constructed by Ministry of Forestry and Water Affairs and handed over to the university.

6.1.4. Premises Used for Theoretical, Practical and Supervised Teaching

Table 6.2: Premises for clinical work and student training

Small animals	No. consulting room	2
	No. surgical room	2
Equine and food animals	No examination room	2
	No. surgical room	2
other	Artificial insemination	1
	Obstetrics gynecology	1
	Diagnostic laboratory	

Table 6.3: Premises for Lecturing

Number of places per lecture hall									
Hall	no.1	no.2	no.3	no.4	no.5	no.6	no.7	no.8	no.9
Places	99	99	99	99	50	50	50	50	100
Total number of places in lecture halls: 696									

Table 6.4: Premises for practical and group work (Number of laboratories and rooms that can be used for supervised group and practical work)

Room	no.1	no.2	no.3	no.4	no.5	no.6	no.7
Places	25	25	25	20	25	15	15
Room	no.8	no.9					
Places	50	25					
Total number of places in laboratories: 125							

Table 6.5: Premises for practical work (Number of laboratories for practical work by students)

See Table 6.4.

6.1.5. Diagnostic laboratories and clinical support services

- **Diagnostic laboratories:** Hospital has its own diagnostic and research laboratories where basic diagnostic test such as serum biochemistry, pH, haemogram, urine analysis etc can be run. Other routine diagnostic procedures are handled in related departments.
- **Central clinical support services:** Clinics has their own X-ray unit, ultrasound unit. Other departments' laboratories are also support clinic services.

6.1.6. Slaughterhouse facilities

There is a pilot slaughterhouse unit in our faculty which is used for educational purpose. When there is a need, animal is slaughtered and used for student education. Students can also practice in dissection of animals.

6.1.7. Milk processing unit

This unit has a capacity of 1 ton milk per day and produce milk product for educational purposes.

6.1.8 Waste management

Local authorities are collecting the faculty's waste at the moment. Unfortunately, there is not any crematorium on the site.

In microbiology and food hygiene (microbiology lab.) most of the biological waste is neutralized by autoclaving or detoxifying chemically.

6.1.9 Future changes

A project of Companion animal hospital and necropsy unit was prepared and submitted to Development Agency of Kars and was approved by the executive board of the agency. The project is now being scrutinized by the Ministry of Development as final decision body.

6.2. COMMENTS

The capacity of the main building is satisfactory for education. In terms of the adequacy of equipment facilities for undergraduate teaching, it could be said that there are differences between the departments. Care and support facilities are unsatisfactory due to financial difficulties.

6.3. SUGGESTIONS

The companion animal hospital and necropsy units has to be constructed.

7. ANIMALS AND TEACHING MATERIAL OF ANIMAL ORIGIN

7.1. FACTUAL INFORMATION

7.1.1. Anatomy: Practical anatomy uses bones, skeletons, cadavers and models for education. The department has got one ruminant, one equine and one poultry model. The bones and skeletons used are of cattle, equine, dog, sheep and goat. Equine and ruminant viscera are also used in this area.

Cadavers: Fresh cadavers of ruminant, equine and carnivore are used in the department. Department has a freezing room. Cadaver pools are also present for formaldehyde fixations.

Specimen: Fresh internal organs of ruminants obtained from slaughterhouse are also been used for training.

Table 7.1: Material used in practical anatomical training

	Cattle	Sheep	Poultry	Horse	Asses	Dog	Cat	Porcine	Bear	Laboratory animals
Models	3	1	1	6	1	1	1	1	-	-
Skeleton	1	3	1	2	-	3	1	1	-	4
Plastinated organs										
Brain	1	-	-	-	1	1	-	1	-	-
Kidney	1	1	-	-	1	-	-	1	-	-
Heart	1	-	-	-	-	1	-	-	-	-
Eye	1	-	-	-	-	-	-	-	-	-
Liver	-	1	-	-	-	1	-	1	-	-
Bones	+	+	+	+	+	+	-	+	+	-
Cadaver	2	-	-	2	-	4	1	-	-	-
Framed pictures of the anatomy atlas	52									

7.1.2 Pathology:

Table 7.2: Number of performed necropsies in past three years

	Number of performed necropsies			Average
	2015	2014	2013	
Cattle	57	58	73	62.7
Sheep	100	53	91	81.3
Goat	9	12	4	8.3
Wild Mammal	6	11	4	7.0
Wild Poultry	5	2	3	3.3
Equine	0	1	0	0.3
Poultry	28	27	17	24.0
Dogs	19	5	4	9.3
Cats	3	1	0	1.3
TOTAL	227	170	196	197.7

7.1.3 Animal Production

There is an education, research and application farm on the faculty campus. The farm consists of dairy, sheep and goat, quail, geese breeding and bee keeping units.

Table 7.3: Number of domestic animals kept on the farm

Food-Producing animals	Numbers in the Faculty Farm
Cattle	154
Sheep	350
Goat	106
Quails	300
Laying Hens	400
Geese	30
Horse	8
Beehive	40

Farm is used regularly for animal production and animal husbandry practical training of veterinary students. Students should visit the farm for practices. When a student becomes an intern, they have to participate in education and practices for clinical examinations such as obstetrical and artificial insemination practices. However, the farm should have further developments and provide better educational activities to the students.

Economical management of the farm, feed ration adjustments are taught to the students practically. The cost and benefit balance is based on this course work, which is a part of the internship farm education.

The administrative structure of the farm has been redesigned recently. The faculty members of the Animal Production department are increasingly involved in some research projects of TUBITAK and university funds.

Intern students systematically visit feed processing factories for production, hygiene and related aspects in their training and education. For internship education and practical training in all clinical and production related subjects, students are periodically taken to the Faculty Farm and also to the local Government and Private Farms and feed stuff production factories in the region for practical work and training.

To feed our animals in the farm, we also plant different types of feedstuffs in our campus area. Animals are fed according to a forage-based feeding strategy and inadequateness is supplemented with concentrates according to their calculated needs plus 15 % extra nutrients.

The animals in the faculty farm are individually recorded and traced according to a management program in that sick animals are taken to the faculty hospital and treated; so no drugs or chemicals are kept in the farm facilities.

Reproduction in the farm is also under control for all species. Students are actively involved in cattle, sheep and goat pregnancy and calving, lambing season activities. The vaccination program of the faculty farm for all species became such a simple disease control.

Scientific experimental studies have been carried out based on national ethical rules.

7.1.4 Food hygiene / Public health

Students are taught about microbiological and chemical analysis of drinking water and animal originated foods such as milk and milk products, meat and meat products, eggs and fish. They can practice at student laboratory and also benefit from research laboratory of food hygiene and technology department. Materials used during practical work are obtained by lecturer. Practical training in meat inspection takes place in pilot slaughterhouse of the faculty where students inspect half and quarter carcasses and practice various techniques. They also experience milk product processing in the small dairy plant.

7.1.5. Teaching Hospital

Department of Internal Medicine has mission of education, research and provides clinical services. The main responsibility of the department is to educate students for protection against disease, diagnosis and treatment. Clinics of Internal Medicine is separated into two clinics as Large Animal Clinics and Small Animal Clinics. Students have chance to watch the academicians during animal examination and students can learn interactively.

Clinics of Internal Medicine provides service daily. Most of the patients include large animals.

Table 7.4. Numbers of examined animals in Department of Internal Medicine in the past three years.

	Numbers of examined animals in Department of Internal Medicine in the past three years.		
ANIMAL SPECIES	2013	2014	2015
Cattle	362	341	402
Equine	4	10	2
Sheep	30	38	40
Goat	6	38	7
Dogs	98	150	173
Cats	8	39	32
Poultry	1	2	6
Others	1	1	
Total	510	619	662

Department of Surgery offers clinic, outpatient clinic and surgical operative services on all domestic and wild animals, within the Hospital.

Table 7.5. Numbers of examined animals in Department of Surgery in the past three years.

ANIMAL SPECIES	Numbers of examined animals in Department of Surgery in the past three years.		
	2013	2014	2015
Cattle	326	336	353
Equine	17	39	14
Sheep	14	37	9
Goat	5	3	4
Dogs	84	92	99
Cats	18	24	37
Poultry	17	6	15
Others	17	1	3
Total	498	538	534

The department of Obstetrics and Gynecology organizes theoretical and practical lectures at graduate levels. Clinical services for diagnosis, treatment and surgical interventions of the diseases related to pregnancy and gynecology of domestic animals have been performed at the department.

Table 7.6: Number of examined animals in Department of Obstetrics and Gynecology in the past three years.

	Number of examined animals in Department of Obstetrics and Gynecology in the past three years.		
ANIMAL SPECIES	2013	2014	2015
Cattle	303	337	385
Equine	1		1
Sheep	8	12	22
Goat	15	88	115
Dogs	18	43	54
Cats	9	8	11
Poultry	1	3	4
Total	355	491	597

Department of Artificial Insemination deals with reproductive problems of all species.

Table 7.7. Number of examined animals in Department of Artificial Insemination in the past three years.

	Number of examined animals in Department of Artificial Insemination in the past three years.		
ANIMAL SPECIES	2013	2014	2015
Cattle	7	10	15
Equine	1	2	1
Sheep	12	22	40
Goat	9	60	75
Dogs	5	5	3
Cats			
Poultry	5	13	6
Total	39	112	140

7.1.6. Consultations and patient flow services

7.1.6.1 Consultation

The animal clinic is open working days of week and 52 weeks of year. Monday – Friday between 8.00 – 17.00. They accept patient whenever there is a need. At the weekend when patient come in, security staff call needing surgeon.

There are consultations sessions every day. Consultation hours depend on cases and sometimes it takes long periods because of further diagnosis, generally half an hour for each case.

7.1.6.2. Patient Flow

Table 7.8. Total amount of animals examined in clinics by all departments.

TOTAL AMOUNT OF ANIMALS EXAMINED IN CLINICS BY ALL DEPARTMENTS				
	2015	2014	2013	Average
Cattle	1155	1024	998	1059.0
Small Ruminants	312	298	99	236.3
Dogs and Cats	409	361	204	324.7
Equine	18	51	23	30.7
Poultry	31	24	24	26.3
Total	1925	1758	1348	1677.0

7.1.7. Vehicles for Animal Transport

There is an animal trailer to transport sick animals to the clinic. But generally owner of the patient brings animal to the clinic with their own vehicle.

7.1.8 On-Call Emergency Services

Emergency service is provided when needed.

7.1.9. On Farm Teaching and Outside Patient Care

7.1.9.1. Ambulatory (mobile) clinic

The number of hours of operation per week depends on the number of patient. Emergency service is provided when needed. If the emergency call comes in day time, students who are in practical training in the clinic at the moment go with the veterinary surgeon.

A state vehicle which has 15 seating capacity, is used for mobile clinic. The mobile clinic has been in service for last three years whenever there is a call, but the number of animals which

have been treated by surgeon has not been recorded. Students and surgeon visit at least 10 villages for each semester. Moreover, dairy cattle reproductive herd health tours have been organized during the spring term last four years under the supervision of gynecology department for teaching and research purposes. There is no record regarding mobile clinic services. However, Gynecology and Obstetrics Department examines about 300 ruminants per year.

7.1.9.2 Other on farm services and outside teaching

The faculty does not have any formal contract with farms or other institutions to allow students for an outside teaching and patient care. However, research contracts already established informally by the Gynecology and Obstetrics department, for last two years, for research and teaching purpose.

7.1.10. Other Information

Clinical services are satisfactory in view of diagnosis, treatment, prophylactic medicine, building capacity. However, the lack of equipment due to financial obstacles is a common problem.

Clinical inspection and treatment fees are determined by the Administration Council taking attention to that of suggested by Union of Doctor of Veterinary Medicine in Kars. The fees are generally lower than those of the private clinics and hospitals.

There is no official procedure which stipulates that private veterinarians may or should be supported. Therefore, it is a common practice to help private veterinarians with their unusual case problems, if any.

During weekends and holidays, some of our students work voluntarily in the private clinics and hospitals.

Owners of patients are admitted to the 'Patient Admittance Unit' and are addressed to the related clinic by the employed staff. In the related clinic, the employed veterinarian keeps records of the identity of the owner (name, surname, address and phone number) and animals (breed, age, reason for visit, diagnosis and treatment). The results of diagnostic analysis (X-ray, ultrasound, ECG etc.) are recorded and kept in the archives of the related department.

7.1.10 Ratios

Animals available for clinical training (in the clinics of the Faculty or seen through the Ambulatory clinic) as ratio to the number of students in last full year of clinical training

Ratios for seen animals per annually graduated students:

R 1:	$\frac{\text{no. of food-producing animals seen at the Faculty}}{\text{no. of students graduating annually}} = \frac{1322}{62} = \mathbf{21.32}$
R 2:	$\frac{\text{annually no. of cattle cases}}{\text{no. of students graduating annually}} = \frac{1059}{62} = \mathbf{17.08}$
R 3:	$\frac{\text{annually no. of equine cases}}{\text{no. of students graduating annually}} = \frac{31}{62} = \mathbf{0.50}$
R 2:	$\frac{\text{annually no. of sheep and goat cases}}{\text{no. of students graduating annually}} = \frac{236}{62} = \mathbf{3.81}$
R 2:	$\frac{\text{annually no. of dog and cat cases}}{\text{no. of students graduating annually}} = \frac{325}{62} = \mathbf{5.24}$
R 2:	$\frac{\text{annually no. of poultry cases}}{\text{no. of students graduating annually}} = \frac{26}{62} = \mathbf{0.42}$
R 2:	$\frac{\text{no. of exotic animals seen}}{\text{no. of students graduating annually}} = \frac{31}{62} = \mathbf{0.50}$

Ratios for performed necropsy per annually graduated students:

R 4:	$\frac{\text{no. necropsies food producing animals}}{\text{no. of students graduating annually}} = \frac{176}{62} = \mathbf{2.84}$
R 5:	$\frac{\text{no. poultry}}{\text{no. of students graduating annually}} = \frac{24}{62} = \mathbf{0.39}$
R 6:	$\frac{\text{necropsies exotic animals}}{\text{no. of students graduating annually}} = \frac{20}{62} = \mathbf{0.16}$

7.1.11 Other Species

There is no record for fish and other food producing animals.

7.2 COMMENTS

The people living in our city are mainly interested in raising food animals rather than pets. In recent years there is an increasing interest in companion animals therefore number of cases admitted to the hospital increased. The families in this area commonly raise goose by traditional ways; they are raised outside by feeding natural flora between May and November, and are slaughtered on December. Each family living in villages has approximately 50-200 geese.

7.3 SUGGESTIONS

The number of animals examined by mobile clinic should be regularly recorded. The faculty should have contracts with farms to allow students for an outside teaching and patient care. The poultry unit of faculty farm should be improved.

8. LIBRARY AND LEARNING RESOURCES

8.1 FACTUAL INFORMATION

8.1.1 Library and other Information Technology Services

The Veterinary students can use University Main Library. The Main Library is located 2 km away from faculty buildings. The library has been used for studying. The library is open from 09.00-21.00 on week days and 10.00-17.00 on Saturday.

We have also a library located in our faculty. In our own library there are veterinary educational books and scientific publications for students. There are 15 computer in this library with internet connection. The library has been used for studying. The visiting number of library increase in exam times.

Main Library:

It is not specific to the veterinary training establishment. It is commonly used by other faculties and institutes of University.

Number of part time employees: 7 (student)

Number of full time employees: 5

Number of journals received each year as hard copies: Around 20 journals which are university journals and sent as a donation.

Number of full access electronic journals: Library has access to Science Direct, Web of Science, Animal Science, A.N.C.O.S, Health and Medical Database, Proquest Academic Research Library, OVID LWW Total Access Database, Engineering Village 2, BMJ Clinical Evidence, BMJ Online Journals, IEEE, Ebrary Academic Complete Database, Ebrary Online Sheet Music and CAB data base.

Availabilities for online literature search: There are 10 computers for online search purposes.

Availability of textbooks: Library is going on restructuring. There are around 80,000 books but small numbers of veterinary textbooks; around 5000.

Number of student reading places: There are 22 tables.

<u>Library opening hours:</u>	Weekdays	Weekends
During term-time:	8:00 – 21:00	10-17
During vacations:	8:00 – 17:00	-

Number of loans to students per academic year: Students may also use the computers to access the scientific journals via the Internet.

Subsidiary Libraries of the Faculty

The students can use such libraries by permission of the related departments. The main library does not hold a list of individual books of the subsidiary libraries.

Information technology service

a) Audio-visual service

Other than audio-visual education supervised by lecturers during lectures, there is no service or a separate room where students may use audio-visual aids unattended.

b) Computer service

This service is not specific to the veterinary training establishment.

Number of full time employees: 5

c) Computer service for student

Full time equivalents of part time employees: 2 students

Number of computers available in the service:

less than three years old: -

more than three years old: 25

Students have free access to those computers for their own use.

8.2. COMMENTS

However, the establishment faces serious financial difficulties in obtaining books and periodicals for use in the library. Students do not prefer to reach information via books or internet because of their poor English.

8.3. SUGGESTIONS

Subscription to a wider variety of periodicals is essential. It would certainly add to the efficiency of education if audio-visual system is implemented.

9. STUDENT ADMISSION AND ENROLMENT

9.1 UNDERGRADUATE COURSE

9.1.1 Undergraduate student numbers

In our Faculty, students have to successfully complete the term obtaining point of 2.00. In following years, students have to complete all the subjects in the curriculum before graduating.

MNY: 5 years

Table 9.1: Undergraduate student composition in year prior to visitation.

	Total number of undergraduate students	697
	Total number of male students	543
	Total number of female students	154
	Foreign students	5
	- from EU countries	
	- from non-EU countries	5

9.1.2 Student admission

The students are admitted by the results of the a nationwide examination applied by Central Student Selection and Placement of the Turkish Council of Higher Education (YÖK). There is no other selection process. According to the results of the Examination, students from different scientific disciplines from different high schools can apply for veterinary training. Each year, our faculty accepts 99 students. Besides the above-mentioned source, there is no supplementary intake of students.

Table 9.2: Intake of Veterinary Students in the past five years

Year	Number applying for admission	Number Admitted	
		Standard intake	Other entry mode (describe)
2015 - 2016	119	119	-
2014 - 2015	119	119	-
2013 - 2014	119	119	-
2012 - 2013	118	118	-
2011 - 2012	106	106	-
Average	116.2	116.2	

9.1.3 Student flow**Table 9.3: Student flow and total number of undergraduate veterinary students**

Number of students present after admitted year 1 (Distribution of students in 2015 – 2016)			Number of additionally admitted students
	1 st year	119	2
	2 nd year	111	1
	3 rd year	175	
	4 th year	144	
	5 th year	93	
	6 th year	25	
	7 th year	4	
	8 th year	23	
	Number of undergraduate veterinary students	694	3

Table 9.4: Number of students graduating annually over the past five years

	Year	Number graduating
	2014 - 2015	60
	2013 - 2014	82
	2012 - 2013	70
	2011 - 2012	74
	2010 - 2011	97
	Average	76.6

Table 9.5: Average duration of studies (distribution of students in years)*

	Duration of Attendance	number
	Years 0 ¹⁾	30
	Year 1	13
	Year 2	6
	Year 3	3
	Number of student graduated in 2007	52

¹⁾ Year matching MNY (5Years) allotted to the veterinary curriculum

*Year prior to visitation

9.2. COMMENTS

The intellectual capacity of registered students show great variations due to the pitfalls of the central system of examination explained above. In order to compensate for the lack of knowledge of students, physics, chemistry, medical biology courses are taught in the first year of faculty.

9.3 SUGGESTIONS

Considering the number of veterinarians in the country and the facilities of our faculty, the number of students entering the faculty should be decreased. However, this quota is only determined by the Turkish Council of Higher Education. Attempts to decrease the quota are still continuing.

10. ACADEMIC AND SUPPORT STAFF

10.1 FACTUAL INFORMATION

Table 10.1: Academic Teaching Staff

	Academic Teaching Staff			
	Full Professor	Associate Professor	Assistant Professor	Assistant
Anatomy	4			2
Biochemistry	1	1	2	1
Physiology	1		2	2
Histology and Embryology	2	1	1	1
History of Veterinary Medicine and Deontology			2	
Pharmacology and Toxicology	1		2	1
Microbiology	2		3	1
Parasitology	3		1	1
Pathology	3			1
Virology			1	1
Animal Nutrition and Nutritional Diseases	2			2
Zootechnics	3		1	1
Anim. Adm. Economics		1	1	1
Food Hygiene and Production		2	1	
Public Health		1		
Surgery	8		2	1
Obstetrics and Gynecology	2	2	2	
Reproduction and Artificial Insemination	2	2	1	
Internal Medicine	3	3	1	1
Total	37	13	23	17

Faculty Staff

Table 10.2. Non-academic Staff Numbers in Faculty of Veterinary Medicine

Staff Numbers in Faculty of Veterinary Medicine			
Administrative Personnel	Faculty Secretary	Veterinarian	Technicians
12	1	1	2
Health Technicians	Private Company Staff	Night watchman	
1	14	4	

Ratios:

Ratios for students per academic staff:

$$\mathbf{R\ 1:} \quad \frac{\text{no. total academic FTE in veterinary training}}{\text{no. Undergraduate veterinary students}} = \frac{90}{697} = \mathbf{0.13}$$

$$\mathbf{R\ 2:} \quad \frac{\text{no. of total FTE at Faculty}}{\text{no. undergraduate students at Faculty}} = \frac{125}{697} = \mathbf{0.18}$$

The allocation of staff to the establishment is determined by the Academic Councils of the departments. The departments submit their personnel requests to the dean. Of the dean and Faculty Council submits to the administration of the University. The personnel are allocated by the administration of the faculty to the departments according to personnel need and the work intensification of the departments.

There are difficulties in recruiting and retaining staff in our university due to the location of our city. Over the past decade, it has been possible to fill vacancies for academic staff, but it has been getting very difficult to do so for support staff.

There is very limited application in our faculty as the employment of additional staff from service income. Other than being assigned by the administration to work in a certain institution, state members are not allowed to do outside work.

It is possible to attend scientific meetings and financial support is provided by the faculty or the university. It is not allowed to go on long term leave with salary except for maternity leave for 14 weeks.

10.2. COMMENTS

Research assistants conduct their doctorate studies under the supervision of their adviser and also attend students' practical training lessons. Because of the geographic location of Kafkas University, academic staff receive more salary than that of other universities in Turkey. Therefore, salary levels of academic staff is acceptable in relation to the level of income in the private sector.

The number and quality of the support personnel are unsatisfactory. The ratio of the teaching staff / undergraduate students is satisfactory. The percentage of veterinarians in the academic staff is very high. Almost all of the academic personnel are veterinarians, which makes it easy for the members of this establishment to make decisions and to understand each other's problems.

10.3. SUGGESTIONS

The number and quality of the support staff should be improved. If salaries and the social conditions could be improved, it would be easier to recruit and retain support personnel.

11. CONTINUING EDUCATION

11.1. FACTUAL INFORMATION

Union of Veterinary Medicine in Kars organized several courses which have been taught by academic staff of our faculty.

Some continuing education program (Artificial Insemination etc.) have been given in the faculty. A national committee is starting to work on a program of continuing education in the field of veterinary medicine.

Some of the departments in the faculty have already organized national congress concerning their topics. Short seminars are given by postgraduate students as part of their course requirement.

11.2. COMMENTS

The quality of the education programs in which the faculty is involved is satisfactory. The degree of participation of veterinarians in those programs is very good.

11.3. SUGGESTIONS

The number of courses mentioned above should be increased.

12. POSTGRADUATE EDUCATION

12.1. FACTUAL INFORMATION

Postgraduate studies in our faculty are centrally supervised. Students accepted by the Institute of Health Sciences of Kafkas University can start their postgraduate education. No postgraduate programs can be started other than the ones stated by the above-mentioned institute. Those postgraduate/doctorate programs of departments other than the clinical departments are shown in Table 12.1. None of the clinic programs is certified by a ‘European Board of Veterinary Specializations’.

12.1.1: Research Education Programmes

In the departments, total of 64 (23 of them female and 41 of them male) PhD students and 40 (27 of them female and 13 of them male) master students continue their postgraduate education.

Table 12.1: Postgraduate education programs

Discipline and/or department	Number of Master Students		Number of Doctorate Students	
		Duration		Duration
Anatomy	18	2 years	3	4 years
Histology and Embryology	34	2 years	10	4 years
Physiology	22	2 years	3	4 years
Biochemistry	27	2 years	12	4 years
Microbiology	26	2 years	15	4 years
Parasitology	13	2 years	4	4 years
Animal Husbandry	12	2 years	0	4 years
Animal Nutrition and Nutritional Diseases	14	2 years	2	4 years
Food Hygiene and Technology	17	2 years	0	4 years
Surgery	10	2 years	3	4 years
Obstetric and Gynaecology	4	2 years	1	4 years
Reproduction and Artificial Insemination	9	2 years	0	4 years
Internal Medicine	17	2 years	6	4 years
Pathology	6	2 years	1	4 years
Total				

12.2. COMMENTS

Approximately one or two postgraduate diplomas / titles are awarded annually, from departments which perform postgraduate study. Some of the students could not finish their postgraduate study because of the financial difficulties. The students receiving a salary are more successful than the ones not. The percentage of veterinarians participating in postgraduate research training programs is poor.

12.3. SUGGESTIONS

More postgraduate students should receive a salary from faculty or institute. Financial support given to research projects of postgraduate students should be increased. If the faculty achieves those goals, the numbers of the veterinarians participating in postgraduate research training programs will increase.

13. RESEARCH

13.1. FACTUAL INFORMATION

Unfortunately, undergraduate students do not involve in research work. Sometimes, students help researchers in their projects.

13.2. COMMENTS and 13.3. SUGGESTIONS

Student should be encouraged to do research work. There must be some research fund to support the student's projects. National Congress of Veterinary Faculty Students is held annually. If we can support our students to do research, they can present their work there.