



NEAR EAST UNIVERSITY

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**FACULTY OF VETERINARY
MEDICINE**

Course Catalogue

2015-2016

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This course catalogue is developed to give as much information as possible in detail about the Veterinary Medicine Undergraduate Programme to all who are interested in the Near East University, Faculty of Veterinary Medicine i.e. future students as well as current students, their parents, academicians, universities, occupational institutions, and, national and international accreditation bodies.

The catalogue includes key information about the Veterinary Medicine Education in the Near East University such as; duration of the programme, mode of study, course descriptions, credit and grading system etc.

We hope you will find all the required information regarding your questions about the Faculty of Veterinary Medicine and its course programme.

Yours Sincerely,

Prof. Dr. Ömer Memduh ESENDAL

Dean

Veterinary Medicine (Vet.Med.) Programme

General Information about the Faculty of Veterinary Medicine

Faculty of Veterinary Medicine of the Near East University was founded in the Fall Term of the Academic Year of 2009-2010 as the first and only private Veterinary Teaching Establishment on the isle of Cyprus and the surrounding territory. The Faculty started its Academic Life on November 2, 2009, with 16 undergraduate students, registered to English Preparatory School. By the Academic Year of 2010-2011 professional education, teaching and training were commenced. Upon the completion of the construction, the Main Faculty Building and Near East Animal Hospital were opened on November 15, 2014. Currently, the Faculty accomplishes its education, teaching and training activities with 28 full time Academic Staff including 13 Professors, 2 Associate Professors, 4 Assistant Professors, 3 Specialists and 6 Research Fellows together with around 10 to 15 part time Academic Staff contributing from other Faculties in Turkey. Teaching and training activities are carried out in the main building with the aid of contemporary research and training laboratories, lecture halls, and fully equipped animal hospital designed primarily for pets and cage birds. On the other hand, two farms outside the Main Campus namely Havva Hanım Teaching, Training, Research and Application Farm for livestock and Arapköy Horse Farm for equides are in use of students for their extramural trainings. The Faculty gave its first and second term graduates in the Academic Years of 2014-2015 and 2015-2016, respectively.

Official Length of Programme: 5 years (excluding one year of English preparatory class)

Mode of Study: Full time

Profile of the Programme and Method of Education

Veterinary medicine is a multidimensional profession requiring knowledge and skills about animal health and veterinary science in particular, as well as animal breeding; animal husbandry; animal nutrition; production, processing and quality of foodstuffs of animal origin; environmental health and protection; biodiversity; and production of biological materials. Education basically aims to train students with more information on certain topics as directed by the World Veterinary Association (WVA), European Association of Establishments for Veterinary Education (EAEVE) and Federation of Veterinarians of Europe (FVE). During the first two years, students are trained for basic veterinary sciences and pre-clinical sciences. For the second two years they are trained for food safety and control, animal husbandry, breeding and nutrition, communicable diseases, public health, and veterinary legislation. Starting from the fourth year spring term and continuing on the fifth year fall term clinical subjects with more emphasis on farm animal medicine, companion animal medicine, and poultry medicine are taught. Last or the tenth semester of the education is dedicated as

internship and composed of only practice training in clinical sciences, food hygiene and technology, and animal husbandry, breeding and nutrition subjects.

Qualification Awarded

Doctor of Veterinary Medicine (Master's Degree/ Second Cycle in Bologna System)

Level of Qualification

Second Cycle

Access requirements

All candidates should have a High School Diploma. Admission of Turkish nationals is done by Placement through a nation-wide Student Selection Examination (ÖSS) administered by Assessment, Selection and Placement Centre (ÖSYM). Admission of Turkish Cypriots is based on the Near East University Entrance and Placement examination. Admission of international students is based on their high school credentials. Proof of English Language proficiency is also required from all candidates.

Qualification Requirements

In order to become a graduate of the Faculty of Veterinary Medicine, one should complete a total of 232 Near East University Credits (Near East University Credit is contact hour based) which is equivalent of 300 ECTS after being successful in all courses taught. Average grade of a student should be at least 2.0 over 4.0, and he or she should have to complete compulsory summer training and internship training successfully.

Arrangements for Transfer from Other Veterinary Faculties (Recognition of Prior Learning)

A student wishing to transfer from another university should prove his or her Proficiency in English. At the time of ÖSS examination the candidate's entrance score must not be less than the lowest score for admission to the Faculty of Veterinary Medicine of the Near East University. The transcript and course contents of the applicant are examined by the Teaching and Training Coordination Committee of the Faculty and the student is then accepted to the appropriate year of the programme.

For further details please contact:

International Student Office

Faculty of Communication, 2nd Floor, Near East Boulevard, P.O. Box 92202, Nicosia, TRNC
via Mersin 10-Turkey

Phone :+90 (392) 680 20 00 (Ext: 295/143/163/424)

Fax :+90 (392) 680 20 40/43

E-mail :info@neu.edu.tr

Examination Regulations, Assessment and Grading

Since all courses are semester based, students are obliged to take one mid-term and one final examination. Although it is not obligatory, depending on the will of course instructor students might experience at least one quiz in some courses. Depending on the nature of the course students are evaluated either by a written (multiple choice and/or essay) or oral examination.

Grading Scheme and Grades

Mark	Course Grade	Grade Points
90-100	AA	4 (Pass)
85-89	BA	3.5 (Pass)
80-84	BB	3 (Pass)
70-79	CB	2.5 (Pass)
60-69	CC	2 (Pass)
55-59	DC	1.5 (Conditional)
50-54	DD	1 (Conditional)
40-49	FD	0.5 (Fail)
39 and below	FF	0 (Fail)

Occupational Profiles of Graduates

Graduates of the Faculty of Veterinary Medicine may progress as an academician; may work as a state veterinarian; may work as a practitioner in private clinics, animal hospitals and polyclinics; companies importing veterinary biological products; companies producing and importing human and veterinary drugs; companies trading human and veterinary drugs and vaccines; companies producing and selling instruments and equipment related to veterinary medicine and animal breeding; companies breeding and selling brood stock animals; food production premises, plants for poultry and beef, slaughterhouses, cold storages; food control laboratories; aqua products production plants; wholesale and retail sale units of products of animal origin; feed production companies; embryo and sperm production centres; poultry brood stock enterprises and hatcheries; sale units, housings and training centres of pet and exotic animals; bee production centres, etc.

Programme Director

Prof.Dr. Ömer Memduh ESENDAL (Dean)

Phone: 00 90 392 675 10 00

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Key Learning Outcomes

The student who successfully completes the program should be able to;

- 1) Use basic and sufficient knowledge in every aspect of veterinary medicine efficiently.
- 2) Perform the profession according to professional and ethical issues as well as animal rights.
- 3) Use clinical skills and laboratory knowledge to reach for a definitive diagnosis by evaluating the data properly.
- 4) Create permanent solutions and apply proper treatment methods.
- 5) Apply basic measures of preventive medicine for individual animal and herd health.
- 6) Apply basic principles of animal breeding, husbandry and nutrition.
- 7) Perform public health and food safety and technology measures.
- 8) Comment on issues related with veterinary legislation and analyse professional problems from various aspects.
- 9) Communicate successfully with his/her peers, members of other professions, animal owners, and employers.
- 10) Express his or her feelings in a good manner both orally and in written;communicate well in a foreign language and use information technologies.
- 11) Investigate, learn and apply individually and accept life-long learning as a principle.

Course List with Near East University Credits and ECTS

Please see the attached example of the diploma supplement which is given to all graduates of our university free of charge. It is arranged in English. The diploma supplement is a document the purpose of which is to provide sufficient independent data to improve the international “transparency” and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and the status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgments, equivalence statements or suggestions about recognition.

Near East University
Faculty of Veterinary
Medicine
Curriculum

1st Year, 1st Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 101	Anatomy I	O	3	4	7	5	7
NEUVET 103	Organic Chemistry	O	2	-	2	2	4
NEUVET 105	Medical Biology	O	2	-	2	2	4
NEUVET 107	History of Veterinary Medicine	O	1	-	1	1	2
TUR 101	Turkish Language I	O	2	-	2	2	2
AIT 101	Atatürk's Principles and Revolution History I	O	2	-	2	2	2
ENG 101	English I	O	4	-	4	4	5
COM 101	Introduction to Computer Science	O	1	2	3	2	2
	TOTAL		16	6	23	19	28
NEUVET 141	Preparation Techniques of Anatomic Specimens	S	-	2	2	1	2
NEUVET 143	Behavioural Sciences	S	1	-	1	1	2

1st Year, 2nd Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 102	Anatomy II	O	2	4	6	4	6
NEUVET 104	Embryology I	O	1	-	1	1	2
NEUVET 106	Histology I	O	2	2	4	3	4
NEUVET 108	Medical Botany	O	1	-	1	1	3
NEUVET 110	Medical Physics	O	2	-	2	2	4
TUR 102	Turkish Language II	O	2	-	2	2	2
AIT 102	Atatürk's Principles and Revolution History II	O	2	-	2	2	2
ENG 102	English II	O	4	-	4	4	5
	TOTAL		16	6	22	19	28
NEUVET 142	Dissection and Exenterating in Domestic Mammals	S	1	2	3	2	2
NEUVET 144	Light and Electron Microscopy and Tissue Preparation Techniques	S	1	-	1	1	2

2nd Year, 3rd Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 201	Anatomy III	O	2	4	6	4	6
NEUVET 203	Biochemistry I	O	2	2	4	3	4
NEUVET 205	Embryology II	O	1	-	1	1	2
NEUVET 207	Physiology I	O	2	2	4	3	4
NEUVET 209	Genetics	O	1	-	1	1	2
NEUVET 211	Histology II	O	2	2	4	3	4
NEUVET 213	Microbiology I	O	1	2	3	2	3
NEUVET 215	Virology I	O	1	2	3	2	3
	TOTAL		12	14	26	19	28
NEUVET 241	Exercise Physiology	S	1	-	1	1	2
NEUVET 243	Evolution Biology and Population Genetics	S	1	-	1	1	2
NEUVET 245	Veterinary Medicine and Public Relations	S	1	-	1	1	2
NEUVET 247	Basic Biochemical Techniques in Biotechnology and their Fields of Application	S	1	-	1	1	2

2nd Year, 4th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 202	Biochemistry II	O	2	2	4	3	5
NEUVET 204	Physiology II	O	3	2	5	4	6
NEUVET 206	Animal Behaviour	O	1	-	1	1	2
NEUVET 208	Immunology	O	2	2	4	3	5
NEUVET 210	Microbiology II	O	2	2	4	3	5
NEUVET 212	Virology II	O	3	-	3	3	5
	TOTAL		13	8	21	17	28
NEUVET 242	Avian Physiology	S	1	-	1	1	2
NEUVET 244	Ecology and Environmental Biology	S	1	-	1	1	2
NEUVET 246	Biotechnology in Microbiology	S	1	-	1	1	2
NEUVET 248	Viral Vaccines	S	1	-	1	1	2

3rd Year, 5th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 301	Entomology	O	1	2	3	2	3
NEUVET 303	Parasitology	O	1	-	1	1	2
NEUVET 305	Pharmacology I	O	2	2	4	3	4
NEUVET 307	Animal Welfare	O	1	-	1	1	2
NEUVET 309	Pathology I	O	2	2	4	3	4
NEUVET 311	Feed Hygiene and Technology	O	3	-	3	3	4
NEUVET 313	Animal Science I	O	1	2	3	2	4
NEUVET 315	Agronomy	O	1	-	1	1	2
NEUVET 317	Topographic Anatomy	O	1	-	1	1	3
	TOTAL		13	8	21	17	28
NEUVET 341	Metabolic Relations among Tissues and Organs	S	1	-	1	1	2
NEUVET 343	Pathologic Diagnostic Techniques	S	1	-	1	1	2
NEUVET 345	Mycology	S	1	-	1	1	2
NEUVET 347	Feed Additives, Feed Legislation	S	1	-	1	1	2
NEUVET 349	Goose and Duck Breeding	S	1	-	1	1	2

3rd Year, 6th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 302	Epidemiology	O	2	-	2	2	2
NEUVET 304	Helminthology	O	2	2	4	3	3
NEUVET 306	Pharmacology II	O	2	-	2	2	2
NEUVET 308	Physiopathology	Z	1	2	3	2	2
NEUVET 310	Food Hygiene and Control	O	2	-	2	2	2
NEUVET 312	Animal Nutrition and Nutritional Diseases	O	2	2	4	3	3
NEUVET 314	Animal Breeding	O	1	-	1	1	1
NEUVET 316	Pathology II	O	2	2	4	3	3
NEUVET 318	Protozoology	O	2	2	4	3	3
NEUVET 320	Animal Science II	O	2	2	4	3	3
NEUVET 322	Biostatistics	O	1	2	3	2	2
NEUVET 324	Introduction to the Clinical Sciences	O	2	-	2	2	2
NEUVET 900	Obligatory Summer Training	O	0	0	0	0	0
	TOTAL		21	14	35	28	28
NEUVET 342	Drug Residues in Feed of Animal Origin	S	1	-	1	1	2
NEUVET 344	Analytic Epidemiology	S	1	-	1	1	2
NEUVET 346	Analysis of Performance Enhancing Agents in Race Horses	S	1	-	1	1	2
NEUVET 348	Laboratory Animal Breeding	S	1	-	1	1	2
NEUVET 350	Exotic and Hunting Animal Breeding	S	1	-	1	1	2
NEUVET 352	Parasitic Zoonosis	S	1	-	1	1	2

4th Year, 7th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 403	Bee Diseases	O	1	-	1	1	2
NEUVET 405	Meat Hygiene, Meat Inspection and Meat Technology	O	1	2	3	2	3
NEUVET 407	Animal Health Economics and Management	O	1	-	1	1	1
NEUVET 409	Poultry Diseases	O	2	2	4	3	4
NEUVET 411	Necropsy	O	1	2	3	2	2
NEUVET 413	Pathology III	O	2	2	4	3	4
NEUVET 415	Aquatic Animal Diseases	O	2	2	3	3	4
NEUVET 417	Milk Hygiene and Technology	O	1	2	3	2	3
NEUVET 419	Veterinary Public Health	O	1	-	1	1	2
NEUVET 421	Veterinary Legislation and Ethics	O	1	-	1	1	1
NEUVET 423	Toxicology and Environmental Protection	O	1	2	3	2	2
	TOTAL		15	14	29	22	28
NEUVET 441	Pathology of Fish Diseases	S	1	-	1	1	2
NEUVET 443	Use of Biotechnology in Animal Nutrition	S	1	-	1	1	2
NEUVET 445	Fermented Meat and Milk Products	S	1	-	1	1	2
NEUVET 447	Sanitation in Food Enterprises	S	1	-	1	1	2
NEUVET 449	Operation Methods in Animal Breeding Enterprises	S	1	-	1	1	2
NEUVET 451	Molecular Mechanisms in Metabolic Diseases	S	1	-	1	1	2
NEUVET 453	Aquarium Fish Diseases	S	1	-	1	1	2
NEUVET 455	Nuclear, Biologic and Chemical Weapons	S	1	-	1	1	2
NEUVET 457	Health Schemes	S	1	-	1	1	2
NEUVET 459	Principles of Research and Publication Ethics	S	1	-	1	1	2
NEUVET 461	Cat and Dog Breeding	S	1	-	1	1	2
NEUVET 463	Ostrich Breeding	S	1	-	1	1	2
NEUVET 465	Veterinary Neurology and Neurosurgery	S	1	-	1	1	2

4th Year, 8th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 406	Surgery I	O	4	-	4	4	4
NEUVET 408	Obstetrics and Gynaecology I	O	4	-	4	4	4
NEUVET 412	Small Animal Internal Diseases I	O	4	-	4	4	4
NEUVET 414	Clinical Practice I***	O	-	16	16	8	8
NEUVET 420	Large Animal Internal Diseases I	O	2	-	2	2	4
NEUVET 900	Obligatory Summer Training	O	0	0	0	0	4
	TOTAL		14	16	30	22	28
NEUVET 442	Reproductive Biotechnological Applications in Fish	S	1	-	1	1	2
NEUVET 448	Artificial Insemination Techniques in Dogs and Cats	S	1	-	1	1	2
NEUVET 452	Reproductive Biotechnology and its Application Areas	S	1	-	1	1	2
NEUVET 456	Physical Therapy and Rehabilitation	S	1	-	1	1	2
NEUVET 460	Clinical Approach to Genital Organ Tumours in Carnivores	S	1	-	1	1	2
NEUVET 462	Wild Animal Medicine	S	1	-	1	1	2
NEUVET 464	Dermatology	S	1	-	1	1	2
NEUVET 466	Neonatology	S	1	-	1	1	2
NEUVET 468	Alternative Treatment Methods in Obstetrics and Gynaecology	S	1	-	1	1	2

5th Year, 9th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 501	Forensic Veterinary Medicine	O	1	-	1	1	1
NEUVET 503	Foot Diseases and Shoeing Technique	O	1	-	1	1	1
NEUVET 505	Surgery II	O	2	-	2	2	2
NEUVET 507	Tooth Diseases and its Surgery	O	1	-	1	1	1
NEUVET 509	Obstetrics and Gynaecology II	O	3	-	3	3	3
NEUVET 511	Artificial Insemination and Andrology	O	2	-	2	2	2
NEUVET 513	Eye Diseases	O	1	-	1	1	1
NEUVET 515	Small Animal Internal Diseases II	O	2	-	2	2	2
NEUVET 517	Large Animal Internal Diseases II	O	2	-	2	2	2
NEUVET 519	Clinical Practice II	O	-	16	16	8	8
NEUVET 521	Radiology	O	1	-	1	1	1
NEUVET 523	Traumatology and Orthopaedic Surgery	O	2	-	2	2	2
NEUVET 533	Anaesthesiology - Reanimation	O	1	-	1	1	2
	TOTAL		19	16	35	27	28
NEUVET 525	Exotic Animal Internal Diseases	S	1	-	1	1	2
NEUVET 527	Behavioural Disorders in Small Animals	S	1	-	1	1	2
NEUVET 529	Clinical Interpretation of Laboratory Data	S	1	-	1	1	2
NEUVET 531	Teat Health Control Programs in Dairy Cows	S	1	-	1	1	2

5th Year, 10th Semester

COURSE CODE	COURSE NAME	O/S	T	P	Total	Credits	
						National	ECTS
NEUVET 502	Intern Education	O	-	24	24	24	26
NEUVET 504	Semester Homework	O		4	4	4	4

Course Objectives and Contents

Year 1 (Semester 1)

Anatomy I (course type: compulsory; course code: NEUVET 101)

Course Objective: The aim of this course is to teach basic anatomical terminology, morphological features of the locomotor system of domestic mammals and birds comparatively.

Course content: Introduction to anatomy and general terminology; Introduction to osteology and chondrology; Head skeleton- Cranium; Head skeleton- Facial bones; Vertebral column, ribs and sternum; Bones of the thoracic limb; Bones of the pelvic limb; Introduction to syndesmology. Articulations and ligaments of cranium, hyoid bone and vertebral column; Articulations and ligaments of the thoracic and pelvic limb; Introduction to muscular system, accessory structures associated with muscles; Cutaneous musculature and muscles of the head and neck; Muscles of the neck, trunk and abdomen; Muscles of the thoracic limb; Muscles of the pelvic limb; Anatomy of the domestic birds (osteology, arthrology and myology)

Organic Chemistry (course type: compulsory; course code: NEUVET 103)

Course Objective: The aim of this course is to teach general structure and features of carbon containing subjects and to gain the ability to perform the experiments individually as well as knowledge of laboratory to the students.

Course content: General chemistry, identifying laboratory, general laboratory rules; Substances and their properties, substance interaction with energy form, basic laws of chemical reactions, instrument and glassware used in the laboratory, chemical reactions; Acids and bases redox system, solutions; Kinetics of chemical reactions, Bonding of C atoms shape, molecular geometry and charge distribution, solutions; Isomers of organic compounds, structure and nomenclature formulas in organic compounds, general basic concepts of organic chemistry, solutions; Special organic chemistry (structure and classification), buffers; Properties and reactions of organic substance groups (alkanes, alkenes, aromatics, alcohols, ethers and phenols), Fehling experiment; Properties and reactions of organic substance groups (thioalcohols, thioesters, halogen compounds, amines, quaternary ammonium compounds); Properties and reactions of organic substance groups (aldehydes and ketones, quinines, carboxylic acids, derivatives of carboxylic acids, esters and amides); Properties and reactions of organic substance groups (thiocarboxylic acids, acid anhydrides, acid chlorides); Properties and reactions of organic substance groups (phosphoric acid esters and their anhydrides, hydroxy- and keto carboxylic acids, di- tri carboxylic acids); Important small molecular weight substances for biochemistry, Molisch experiment; Biopolymers, Acrolein Experiment.

Medical Biology (course type: compulsory; course code: NEUVET 105)

Course Objective: The aim of this course is to provide students with a comprehensive knowledge of medical biology, providing them with a thorough grounding related to the full spectrum of biological systems from molecular levels up to and including organismal biology.

Course content: Introduction to medical biology; Classification and systematics; Evolutionary processes; Chemistry of life; The cell; Kingdom fungi; Kingdom Animalia; Bacteriology; Virology; Animal form and function; Animal nutrition

Veterinary History (course type: compulsory; course code: NEUVET 107)

Course Objective: Students, university faculty, and ensure the compliance of the veterinary profession by providing information on the historical development of veterinary medicine in the world and Turkey to create professional awareness.

Course content: Higher education concepts, institutions and members, the development of universities in the world and Turkey; The veterinary profession in the university system and its place in the family: paramedical and biomedical occupation groups; Throughout history, human-animal relationship, domestication and the emergence of veterinary medicine; The profile of veterinary medicine from past to present: the first age, medieval, modern age; Various civilizations, Veterinary medicine and veterinary applications era in Islamic Civilization; History of the disease and treatment paradigms; The organization of veterinary medicine in the world and Turkey; International and national organizations related to veterinary medicine; Pioneers of the veterinary profession in the world and Turkey; Human services for veterinarians; The changing vision of veterinary medicine in the world and the European Union Process reflection of the Turkish veterinary medicine and veterinary medicine education.

Foreign Language I (course type: compulsory; course code: ENG 101)

Course Objective: To provide students with a comprehensive working knowledge of veterinary English terminology, covering both anatomical and procedural nomenclature.

Course content: Introduction to medical terminology; Positional terminology; Skeletal system; Common terms used for equine, cattle, goats, sheep, swine, dogs and cats; Common species names; Urinary system; Cardiovascular system; Respiratory system.

Anatomical Materials Preparation Techniques (course type: elective; course code: NEUVET 141)

Course Objective: In this course, students will prepare anatomical preparations intended to consolidate anatomy information.

Course content: The different fixation methods used in anatomy; Often used fixation fluids and preparation of cadaver; Self-study: preparation of cadaver; Prepared bone preparations and to make the skeleton; Self-study: skeleton construction; Self-study: skeleton construction; Dissection materials and planning of dissection; Methods of dissection and exenteration; Self-

study: dissection – Ruminant, Carnivore, Avian Self-study: Dissection; Vascular injection (latex) techniques, Embalming

BEHAVIOUR SCIENCES (course type: elective; course code: NEUVET 143)

Course Objective: Provide students with an introduction to the basics of behavior.

Course content: Methods used in behavioural sciences; Physiology of behaviour; Individual behaviour; Cognition and behaviourism; Nature versus nurture; Behavioural modifications; Visual communications; Non-Visual communications; Decision making; Introduction to behavioural ecology; Sociobiology; Psychopathology; Stress.

Year 1 (Semester 2)

Anatomy II (course type: obligatory; course code: NEUVET 102)

Course Objective: To teach students the normal shape, structure, natural posture of the viscera and the relations with neighbour organs of the domestic mammals and birds comparatively.

Course content: Introduction of viscera, general definitions; Digestive system, mouth, oral cavity, tongue, pharynx, teeth; oesophagus, stomach; small and large intestines; salivary glands, liver, gall bladder, pancreas; Respiratory system; nasal cavity, larynx and sinuses, trachea and lungs; Urinary system; kidney; ureter, urinary bladder, urethra; Male genital organs; Female genital organs.

Embryology I (course type: obligatory; course code: NEUVET 104)

Course Objective: To investigate the life before birth in domestic animal and before hatching in birds, following zygote and to observe the differences among them.

Course content: The reproductive system of the female, gametogenesis, ovulation, genital cycle (ovarian cycle and uterine cycle), oestrous cycle; The reproductive system of the male, gametogenesis, and internal (accessory glands) and structure of spermatozoa; The transport in the female genital tract of the oocyte and sperm, the fertilization process, the acrosome reactions, zona reaction, gender discrimination; Egg types, cleavage shape according to species and developments following to zygote in amphioxus; Cleavage shape according to species and developments following to zygote frog, mammals and bird; According to species (amphioxus and amphibians, birds and mammals) the formation of morula, blastula, and gastrulation; Neurulation and the formation of somites and chorda dorsalis; Formation of the neural plate, notochord, and neural induction, sclerotome, myotome, dermatome; Extraembryonic membranes (amnion, chorion, allantois and yolk sac) and umbilical cord; Implantation and placentation according to relationship of foetal and maternal septa; placenta types; Congenital malformations.

Histology I (course type: obligatory; course code: NEUVET 106)

Course Objective: Structural and functional properties of the cell is the smallest living unit is taught. Structural properties of tissues by the combining of the cells of mammals and birds, in comparison aimed to teach pet.

Course content: Main features of the cells, cytoplasm, cytosol, types of microscopes; Cell membrane, endoplasmic reticulum, golgi apparatus, lysosomes, mitochondria secretory vesicles, lysosomes, endosomes, peroxisomes, microtubules, cilia and flagella, filaments, cytoplasmic inclusions; Cell and organelles showed with audio-visual system; Nucleus membrane, chromatin organization, chromosomes, nucleolus; Amitosis, mitosis, endomitosis, polyploidi, aneuploid, meiosis, cell differentiation, cell cycle, mitosis; Blood tissue, erythrocytes, leukocytes, agranulocytes, granulocytes, thrombocytes, hemopoiesis, hemocytoblast, red bone marrow, dog blood smear, horse blood smear; Cartilage tissue; Bone tissue; Muscle tissue; Cardiac muscle; Nerve tissue; Central nervous system.

Medical Botantics (course type: obligatory; course code: NEUVET 108)

Course Objective: Important plants used in veterinary medicine, and the use of herbal ingredients.

Course content: The number of plants, plant cells, plant materials; Synthesis and metabolism in plants; The effects of herbal substances is in live plants and nomenclature of the herbal substance; Active substance group in plants; Preparation of a botanical drug substance, therapeutic dosage amounts of medicinal plants; Safety of medicinal plants; The important plants used in veterinary medicine, and the use of herbal ingredients; Important plants used in veterinary medicine, and the use of herbal ingredients; Important plants used in veterinary medicine, and the use of herbal; The doses for use in human medicine but notice the plants are in use and potential use in veterinary medicine.

Medical Physics (course type: obligatory; course code: NEUVET 110)

Course Objective: Tissue and organ level to the cellular level as bioelectrical events, circulation and recognition of observation measurement and diagnostic tools to establish relationships between technical disciplines and medicine on the basis of the understanding of the biophysical functioning of the respiratory system.

Course content: The organization of cell membranes and membrane structure; Passive and active transport; Stimulation of membranes, measurement of membrane potential, resting and oxygen potentials; The basic concepts related to the propagation of stimuli in the nervous system; Heart bioelectric events; Electrocardiography basics of biophysics; The concept and calculation of the heart's electrical axis; The dynamics of muscle contraction, muscle contraction theory; Breathing mechanics; Surface tension in the lung; Bioelectrical measurements and observation tools; Bioelectric application tools; Roaming hydrostatic factor and the basic concepts of hemodynamic; Blood flow properties.

Foreign Language II (course type: obligatory; course code: ENG 102)

Course Objective: To provide students with a comprehensive working knowledge of veterinary English terminology, covering both anatomical and procedural nomenclature.

Course content: Integument system; Endocrine system; Reproductive system; Nervous system; Eyes and ears; Hematologic and lymphatic system; Immune system; Animal testing; Diagnostic evaluation; Drugs, diseases and dissection; Dogs, cats, equine, swine, ruminants, birds, other species.

Dissection And Exenteration in Domestic Mammals (course type: obligatory; course code: NEUVET 142)

Course Objective: To achieve basic dissection knowledge and ability, to teach theoretical principles of exenteration and application in exenteration practices in different animal species.

Course content: Introduction to dissection, basic terminology and preparation of cadaver; Dissection methods of the skin, muscles, joints, pectoral vessels, forelimb vessels, hind limb vessels, forelimb nerves, hind limb nerves; Ruminant exenteration; Carnivore exenteration; Equine exenteration.

Year 2 (Semester 3)

Anatomy III (course type: obligatory; course code: NEUVET 201)

Course Objective: To teach students the normal shape, structure, natural posture of the viscera, circulatory and nervous system, sensory organs and the relations with neighbour organs of the domestic mammals and birds comparatively.

Course content: Introduction to cardiovascular system, anatomy of heart, general knowledge about vessels, aorta; Pericardium, heart; Arterial systems; Venous systems; Lymphatic system; Systema nervosum centrale; Encephalon; Medulla spinalis; Meninges; Systema nervosum periphericum; Systema nervosum autonomicum; Sensory organs (olfactory, vision and gustatory organs); Sensory organs (vestibulocochlear organ, skin and cutaneous organs); The circulatory, nervous system and sense organs of domestic birds.

Year 2 (Semester 3)

Biochemistry I (course type: obligatory; course code: NEUVET 203)

Course Objective: Form the basis of theoretical and clinical courses to gain the basic biochemistry information that are necessary to determine the structure, properties and functions of molecules which play the role on continuity of life.

Course content: Biophysical chemistry; Bioelements; Carbohydrates; Lipids; Proteins; Nucleic Acids; Enzymes.

Year 2 (Semester 3)

Embryology II (course type: obligatory; course code: NEUVET 205)

Course Objective: To investigate the life before birth in domestic animal and before hatching in birds, following zygote and organogenesis.

Course content: Development of central nervous system and peripheral nervous system; Development of sensitive organs; Development of the ears; Development of the related organs with oral cavity; Formation of pituitary gland, adrenal gland, thyroid, parathyroid gland and thymus; Development of the gastrointestinal tract; foregut, oesophagus, stomach, midgut, hindgut, septation of the cloaca; Development of the liver, gallbladder and pancreas; Development of respiratory system; trachea and lungs, pulmonary morphogenesis, formation of alveoli and larynx; Development of cardiovascular system; Formation of aortic arches and great arteries, venous systems, heart and lymphatic system; Development of urinary systems; Development of male genital system; Development of female genital system and mammary glands.

Year 2 (Semester 3)

Physiology I (course type: obligatory; course code: NEUVET 207)

Course Objective:

Course content: Body fluid and homeostasis; Blood physiology; The excretory system; The respiratory system; The nervous system; Sense organs; Muscle physiology.

Year 2 (Semester 3)

Genetics (course type: obligatory; course code: NEUVET 209)

Course Objective: To provide students with a thorough grounding in basic genetics, including the history of genetic discoveries, molecular techniques and applications.

Course content: Introduction to genetics; Mitosis and meiosis; Mendelian genetics; Chromosomal inheritance; Gene mapping; Genetic mutations; Bacterial genetics; Viral genetics; Genetic research techniques; Genetic engineering; Human genome project; Darwin and evolutionary theory; Evolution and natural selection.

Histology II (course type: obligatory; course code: NEUVET 211)

Course Objective: To educate qualified students in the field of fine structures of the organs, tissues, cells and supporting cells which constitute the systems of domestic animals comparatively.

Course content: Digestive system, oral cavity: lips, cheeks, tongue, teeth, tonsils; the histological features of pharynx and oesophagus filiform papillae, vallate papillae, oesophagus; Compound stomach, rumen, reticulum, omasum; Simple stomach; Glands

associated with the digestive tract; Respiratory system; Urinary system; The male reproductive system; The female reproductive system; Heart, haemopoietic organs; Endocrine system; Integument system; Eye; Auditory and vestibular system.

Microbiology I (course type: obligatory; course code: NEUVET 213)

Course Objective: The aim of the course is to teach the basic phenotypic and genotypic characteristics of the bacteria, to teach and show the basic techniques that are used in the laboratory diagnosis of bacteria, allow students to perform these techniques on their own, to teach the basic concepts of general bacteriology and help the students to gain the ability of interpretation on microbiological issues.

Course content: Bacterial nomenclature and classification; Organelles of bacteria – external structures; Organelles of bacteria – internal structures; Bacterial metabolism; Propagation of bacteria; Factors affecting bacterial growth; Sterilization and disinfection; Modes of action of antibiotics; Mechanisms of antibiotic resistance; Bacterial genetics; Transfer of genetic materials; Pathogenesis of bacterial infections; Microbial flora and ecology; Microbial diagnostic methods, bacterial isolation and identification.

Virology I (course type: obligatory; course code: NEUVET 215)

Course Objective: Be defined in the broadest sense of the virus as an infectious agent, structural and determination of properties infectivity, the identification of the host system, virus infection of the development of forms of the organism, of immune against viruses response and is intended to describe the techniques used in the diagnosis of viral infections.

Course content: Virus definitions and properties; Virus and other microorganism differences; Cell culture and preparation techniques; Classification of viruses; Structural features of viruses; The proliferation of virus; Viral diseases pathogenesis; Viral infection of epidemiology; Antiviral immune response; Identification of virus; Diagnosis of viral diseases, use, serological and virological tests.

Embryology (course type: obligatory; course code: NEUVET 217)

Course Objective: It starts with fertilization, the incubation of poultry and examine prenatal life in mammals; developmental differences between organisms are intended to be identified.

Course content: The reproductive system of the female, gametogenesis, ovulation, genital cycle; The reproductive system of the male, gametogenesis, and internal (accessory glands) and structure of spermatozoa; The transport in the female genital tract of the oocyte and sperm, the fertilization process; Egg types; Extraembryonic membranes; Development of central nervous system and peripheral nervous system; Development of sensitive organs; Development of the related organs with oral cavity; Development of the gastrointestinal tract; Development of cardiovascular system; Development of urinary systems.

Exercise Physiology (course type: elective; course code: NEUVET 241)

Course Objective:

Course content: Exercise physiology and athletic ability; Athletic types and characteristics; The muscle metabolic systems in exercise; Respiration in exercise; Oxygen consumption in exercise and lung ventilation; The differences in anatomy of lung and respiration types in athletic species; The changes in blood gases; The cardiovascular system in exercise; The work in exercise and heart flow rate; The effects of exercise on the hypertrophy of heart; Vascular physiopathology in exercise; Relation of exercise with the parameters of erythrocyte; Thermoregulation, hormonal response and diet in exercise; Assessment of the drugs used in veterinary medicine.

Evolution and Population Genetics (course type: elective; course code: NEUVET 243)

Course Objective: Introduce students to the basic principles of evolutionary theory and the mechanisms of population genetics and natural selection which lead to speciation and evolution.

Course content: Introduction to evolution and population genetics; History of evolutionary theory; Darwin's agents of evolution; Evolution of populations; Hardy-Weinberg theorem; Evidence of evolution; Convergent and divergent evolution; Extinctions; Macro evolution; Biogeography; Population genetics; Genetic drift; Inbreeding depression.

Veterinary Medicine And Community Relations (course type: elective; course code: NEUVET 245)

Course Objective: Students communication skills, the use of mass media and good veterinary practice medicine by providing information about colleagues, to contribute to the relationship with the patient and society.

Course content: The purpose of veterinary medicine and public relations courses; Sociology, society, social relations, social group concepts; Social status, social prestige, status and role concepts varieties; The concept of communication and communication types; Effective communication skills, mistakes made in communication; Mass communication, media relations of Veterinarians; Good veterinary practices; Relationships with colleagues of veterinarians; Veterinarians patients, patient owner / client relationship with; Public health veterinarians and animal rights in tasks, society and relationships; Relations with the biomedical profession of veterinarians; Visionary changes in veterinary medicine, Medicine, One Health Concept One, preventive veterinary medicine, animal welfare, animal-assisted therapy; The use of information technology in veterinary medicine.

Year 2 (Semester 4)

Biochemistry II (course type: obligatory; course code: NEUVET 202)

Course Objective: Explanation of the basic molecular structure and properties of the organism, the participation of these molecules in the synthesis and degradation pathways to learn.

Course content: Fat soluble vitamins; Water soluble vitamins;Hormones;Hormones of gastrointestinal system;Carbohydrate metabolism; Lipid Metabolism; Protein metabolism; Nucleic Acids Metabolism.

Physiology II (course type: obligatory; course code: NEUVET 204)

Course Objective:

Course content: The circulatory system; Gastrointestinal system- gastrointestinal organs, the types of feeding, gastrointestinal tract, food taking mastication, neural and hormonal control of digestion, digestion in the stomach, digestion in the ruminants, digestion in the intestines, gastrointestinal absorption,physiology of gastrointestinal disorders; The endocrine system- hormones, the types of hormones, the pituitary hormones the thyroid hormones, adrenocortical hormones, insulin, glucagon, local hormones; Male reproductive system; Female reproductive system; Thermal physiology.

Animal Behaviour (course type: obligatory; course code: NEUVET 206)

Course Objective:

Course content: Physiology of behaviour- history of behaviour, domestication, the effects of central nervous system and endocrine system on behaviour, the effects of heat on behaviour, learning in animals; Dog behaviour; Cat behaviour; Cattle behaviour; Sheep and goat behaviours; Horse behaviour; Pig behaviour; Avian behaviour; Behavioural disorders in animals.

Immunology (course type: obligatory; course code: NEUVET 208)

Course Objective: The aim of the course is to teach the basic concepts of immunology in all aspects with the aid of laboratory applications carried out by the students.

Course content: Basic immunological concepts, description of antigen; Cells and organs of the immune system; Description of antibodies, and antigen receptors; Immunoglobulin and T-cell receptor (TCR) diversity, and major histocompatibility system; Cytokines, and phagocytosis; Antigen processing and presentation, and humoral immune response; Complement system, and cellular immune response; Regulation of the immune response, and immunologic tolerance; Mucosal, foetal and neonatal immunity; Immunity against bacteria and viruses; Immunity against parasites and tumours; Immunity against foreign tissues, and hypersensitivity reactions; Autoimmune diseases, and immunodeficiency disorders; Vaccines and vaccination procedures, and serology.

Microbiology II (course type: obligatory; course code: NEUVET 210)

Course Objective: The aim of the course is to teach the aetiology, epidemiology, pathogenesis, clinical signs, post-mortem findings, laboratory diagnosis, treatment and prevention of bacterial diseases important in Veterinary Medicine.

Course content: Taxonomy of important bacterial species in Veterinary Medicine; Staphylococcus and Streptococcus infections; Corynebacterium, nocardia and actinomycetes infections; Bacillus infections; Clostridium infections; Mycobacterium infections; Enterobacteriaceae infections; Burkholderia and pseudomonas infections; Brucella infections; Pasteurella, mannheimia, haemophilus and actinobacillus infections; Taylorella and bordetella infections; Campylobacter and spirochete infections; Mycoplasma, ureaplasma, acheloplasma and spiroplasma infections; Coxiella, francisella, chlamydochlamydia and rickettsia infections.

Virology II (course type: obligatory; course code: NEUVET 212)

Course Objective: This course in the area and / or viral infections seen in different animal species in the country and etiological these infections, epidemiology pathogenesis, clinical and diagnostic features and prophylactic aimed to teach the alternative.

Course content: Picornaviruses infections; Flavivirus infections; Coronavirus infections; Rhabdovirus; Paramyxovirus infections; Orthomyxovirus infections, bunyavirus infections; Reovirus infections; Retrovirus infections, calicivirus infections; Arterivirus infections, prion diseases; Adenovirus infections; Herpesvirus infections; Parvovirus infections, papillomaviruslar; Poxvirus infections; Viral zoonoses.

Poultry Physiology (course type: elective; course code: NEUVET 242)

Course Objective: In the poultry; constituents of blood, blood cells and the function of the cardiovascular system, basal metabolic rate, digestion and absorption physiology, excretory system, respiratory system, nervous system, hormones, male and female reproductive systems, egg formation, is aimed to explain the heat mechanism and migration.

Course content: General information on poultry; Evolution and poultry; Wings, fly, aerodynamic structures, and functions feathers, beak and feet function, smell, taste and sight senses; Homeostasis in poultry; Respiratory physiology of poultry; Circulatory physiology; In the poultry thermoregulation, Bergman and Allen's Rules, and the importance of latent heat loss, water balance; Blood physiology; Winged migration in animals, and physiological characteristics of effective methods for migration; Renal physiology in poultry; Digestive physiology in poultry.

Ecology And Environmental Biology (course type: elective; course code: NEUVET 244)

Course Objective: Introduce students to the basic principles of ecology and environmental biology. Highlighting the roles of individuals, populations, communities and ecosystems in the functioning of a healthy and productive environment.

Course content: Introduction to ecology; Physiological ecology; Biomes, systems and cycles; Ecosystem energetics; Population ecology; Community ecology; Evolution and Adaptation; Pesticides and environment; Fertilisers and environment; Climate change; Fisheries and

pollution; Habitat destruction; Population dynamics – Overfishing/ Bycatch/Discards
Fisheries Case study; Ecological monitoring.

Viral Vaccines (course type: elective; course code: NEUVET 248)

Course Objective:

Course content: What is immunization? By date on vaccinations; Basic immunological knowledge; Vaccine types: conventional vaccines; Vaccine preference criteria; Vaccine complications; Viral disease / s related information, preferences and applications by commercial vaccine, legislation (rabies), (BVDV, rotavirus, coronavirus vaccines), (IBR respiratory infections and other factors, PI-3, BRSV, such as adenovirus), (Rinderpest, PPR, sheep and goat pox,bluetongue), (cats, dogs and horses with vaccines for viral diseases)

Year 3 (Semester 5)

Entomology (course type: compulsory; course code: NEUVET 301)

Course Objective: Teaching and having the skill of application about the arthropod species infested on cattle, sheep, goat, horse, cat, dog, pig and poultry; their development and disorders on their hosts; their epidemiology, diagnose, treatment and control.

Course content: Introduction to entomology, aim of the lesson and general systematic; Systematic of flies (Diptera), morphology, control of mosquitos; House flies, sand flies, tabanids and tse tse flies, their vectorship and control;Morphology, biology, symptoms and control of miasis agents;Screw worm; Bed bugs (Cimex spp., Reduviidae), cockroaches, odonata, coleoptera infestations, vectorship, treatment and control; Mallophaga and anoplura infestations of mammalian; Mallophaga and anoplura infestations of poultry; Fleas, morphology, taxonomy, biology, vectorship, flea allergy, treatment and control; Ticks in ixodidae family, morphology, biology, diagnose, treatment, prophylaxis and control; Ticks in argasidae family, morphology, biology, diagnose, treatment, prophylaxis and control; House dust mites, dermanyssus gallinae, ornithonyssus spp, grain and cheese mites, morphology, biology and control; Morphology, biology and control of scabies; Comparison of scabies species, diagnose, treatment, prophylaxis and control; Zoonose arthropods and control.

Parasitology(course type: compulsory; course code: NEUVET 303)

Course Objective: Teaching and having skills of parasitological terms, nomenclature of parasites and their infections, general contamination routes, reproduction, development, negative effects and control of parasites before Protozoology, Helminthology and Arthropodology lectures.

Course content: Basic parasitological terms, nomenclature of parasites and their infections; History, morphology and physiology of parasites; Movement, reproduction and vectorship of parasites; Penetration routes of parasites and their development types; Relationship of host – parasite, contamination; Zoonoses and zoonose parasites; Relationship of environment – parasite; Interaction between parasite and host. Their exploiting effects; Toxic, irritative and traumatic effects of the parasites; Parasite laboratory and diagnose on live animal; Parasitological diagnose techniques on dead animals; Factors affect the expanding of parasitic diseases; Treatment and control in parasitic diseases; Antiparasitic drugs and their mode of action.

Pharmacology I (course type: compulsory; course code: NEUVET 305)

Course Objective: To educate qualified students in the field of pharmacodynamics, pharmacokinetics, drugs using in patient animals. And to educate qualified students in the field of drug action on the systems of body include comprising drug source, properties, effects, usage and the scientific principles of correct and conscious drug use.

Course content: Pharmacology and drug terms, history, pharmacopoeia; Nomenclature, and sources, properties and classifications of the drugs; Dosages, safety and dose – action relationships of drugs; Dose – response relationships, drug doses; Factors affecting dosage regimens, general mechanisms in the absorption of drugs and passage of drugs across biologic membranes; Drug administration routes and absorption, distribution and accumulation of drugs; Biotransformation and elimination of drugs, mechanisms of drug action; Drug interactions, adverse and toxic effects drug; the factors changing drug effects and doses; Developments of new drugs and pharmaceutical preparations; Pharmacography and prescription writing and preparation of pharmaceutical preparations (Galenic pharmacy); Introduction to the neuropharmacology, acting mechanism of these drugs; Antibiotics: Beta-lactam antibiotics, penicillin and cephalosporin, other beta-lactam antibiotics; Aminoglycoside antibiotics, macrolide and lincosamide antibiotics, chloramphenicol and derivatives; Tetracycline antibiotics, polypeptide antibiotics, other antibiotics and antimicrobial agents; Quinolone carboxylic acid derivatives, nitrofurans and nitroimidazoles; Sulphonamides, general features, systemic sulphonamides, enteric sulphonamides, trimethoprim sulpha drugs and combinations; Anthelmintic drugs, mechanisms of action of anthelmintic, anthelmintic resistance to drugs, drugs acting on trematodes and tapeworms; Nematodes effects drugs, benzimidazole derivatives, anthelmintic antibiotics, the drugs used filariasis; Protozoa effects drugs, drugs used in coccidiosis, histomoniasis used drugs, babesiosis, drugs used in theileriosis and tripanosomiasis; Insecticidal drugs: Older types of insecticides, organochlorine insecticides, organophosphorus insecticides, carbamate insecticides, organic thiocyanate and pyrethroid insecticides; Antimycotics, antibiotics, antimycotics, imidazole and triazole compounds, antiseptic and disinfectant drugs.

Animal Welfare (course type: compulsory; course code: NEUVET 307)

Course Objective: To obtain sufficiency and necessary knowledge about animal welfare and to teach general strategy of farm animal welfare and welfare on the farm, during transport and at slaughter.

Course content: The aim of animal welfare course. The historical development of animal welfare, concepts and approaches; Animal welfare and veterinary ethics, the responsibilities of veterinarians; Animal welfare, animal protection and animal rights, the 3 R principles; The animal welfare legislation in Turkey and in the World; Determination of physiological responses against pain and distress; Determination of physiological responses against pain and distress; Relationship with animal welfare, behaviour and physiology; General strategy on animal welfare; Broiler welfare on the farm; Laying hen welfare and alternative housing systems; Farm animal welfare on the farm; Farm animal welfare during transport; Farm animal welfare during slaughter; Animal welfare problems- Solution suggestions / General evaluation.

Pathology I (course type: compulsory; course code: NEUVET 309)

Course Objective: To teach students the aetiological factors and mechanisms underlying diseases and the appreciation, recognition and differentiation of terms degeneration, inflammation and neoplasia and also able them to proper use of these information verbally and orally.

Course content: Introduction to recommended books; Important terminology in pathology; Disease, degeneration and reaction, aetiology and pathogenesis of diseases. Diseases at cellular level, functions of cell organelles in cellular adaptation; Autophagia, heterophagia, phagocytosis, pinocytosis and endocytosis; Types of cellular adaptation (cellular atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia); Definitions and macroscopic and microscopic recognition of agenesis, aplasia, atresia; Reversible and irreversible cell degenerations (degeneration and necrosis) and their recognition, pathogenesis and macroscopic and microscopic characteristics; Disturbances in blood flow (hyperaemia, haemorrhage, thrombosis) their recognition, pathogenesis and macroscopic and microscopic characteristics; Disturbances in blood flow (ischemia, infarct, shock and oedema) their recognition, pathogenesis and macroscopic and microscopic characteristics; Inflammation, functions, aim, causes. Changes during inflammation: haemodynamic, permeability, extravasation; Cellular changes during inflammation: Margination, pavementing, migration, chemotactic factors, mediators; Mediators of inflammation, phagocytosis, microbicidal mechanisms, complement, phagocytosis defects; inflammatory cells; Inflammation and morphological classification. Acute-chronic-granulomatous; Nomenclature; terminology for distribution and severity; gross and microscopic appearance; Immune injury and inflammation; Repair, regeneration, granulation tissue; Fever, acute phase reactions; Definition, classification and nomenclature of tumours, general characteristics of benign and malignant tumours ; General characteristics of benign and malignant tumours and Growth and metastasis pattern of malignant tumours and prognosis of neoplastic developments; Disposition in tumours, causes of tumours and mechanisms of carcinogenesis; Local and systemic effects of tumours, treatment principals in tumours (surgical treatment, radiotherapy, chemotherapy, hormonal and immunotherapy).

Food Hygiene and Technology (course type: compulsory; course code: NEUVET 311)

Course Objective: Digestion of feedstuffs, metabolism, digestibility according to species, feedstuffs used in animal feeding, feed processing methods and technologies taught equipped with this information is intended to educate veterinarians.

Course content: Digestion of feedstuffs according to species and metabolism;Introduction to feed science, defining and classification of nutrients;Feed evaluating systems, factors affecting digestibility;Factors of nutrient value of feeds and calculation of energy;Forage feeds, general properties and classification (wet forages, dry forages), Rough oath definition, general features and classification (juicy fodder, dry forages), factors affecting pasture quality;Wet forages (green grass, silage and pasture);Dry forages (hay, straw);Concentrate feeds and classification (energy feeds, protein feeds, vitamin and mineral premix and mixed feeds) ;Energy feeds (grains);Energy feeds (fats, other energy feeds);Protein feeds (protein feeds derived from vegetables and animals);Vitamin and mineral premix, feed additives (sedatives, mould inhibitors, colourants, prebiotics, probiotics);Feed processing methods and techniques; Mixed feed technologies.

Animal Breeding I (course type: compulsory; course code: NEUVET 313)

Course Objective: Several characteristics of farm animals, animal farming, yield and genetic characteristics will be the basis to teach information.

Course content: Overview of animal husbandry, importance and history. The history of livestock animals, domestication, taxonomy, breeds and classification; Characters in farm animals, yields, body colours and markings, body colour inheritance;Reproduction and fertility, reproductive performance criteria, conditions affecting fertility. Growth, periods of growth and meat yield;Lactation and milk yield, milk synthesis and milking; milk production, lowering the milk milked by hand milking, machine milking, milking machine characteristics, milking implementation, milking hygiene, quality milk production, milk composition, factors affecting lactation,, milk yield factors affecting;Constitution and behaviour, type scoring and body condition scoring;Environment and adaptation, adaptation and acclimatization to the environment and the importance of breed;Resistance to stress and disease, herd health programs;Selection and breeding methods;Livestock farming in the world and in Turkey, the transition to modern farming, milk and meat production and consumption, Turkey, Cyprus and worldwide comparison with the general structure of livestock;General structure of poultry industry in animal production, main scientific and technological developments contributed to modern poultry production industry. Chicken breeds and their characteristics;Modern broiler and layer genotypes, breeder houses, production goals in breeder production, husbandry management practices in breeders. Forced moulting in chickens, rationale and methods;Storage of hatching eggs, hatching conditions, embryo development, hatch, chick quality, factors effecting hatchery performance, economic productivity;Layer genotypes, layer houses, managing program for the layer chicks, pullet and hens, production economics. Broiler genotypes, broiler houses, preparing of the house for the chicks, managing program for the broilers, production economics;Introduction to pig farming, pig farming, the importance of pig breeds, pig farm management.

Agronomy (course type: compulsory; course code: NEUVET 315)

Course Objective: The main aim of this course is to provide basic information on forage crops, to identify forage crops species and to teach growing techniques of those species.

Course content: For general information about the soil; Herbal general information about agriculture, general features of forage crops;General characteristics of forage legumes;Alfalfa, clover, sainfoin, vetch;General characteristics of wheatgrass species;Cocksfoot, brom, fescue;Forage grasses, corn;Wheat, barley, rye, oat;General characteristics of other forage grasses;General characteristics of other forage grasses);Poisonous plants;Poisonous plants;Poisonous plants.

Topographic Anatomy (course type: compulsory; course code: NEUVET 317)

Course Objective: To teach students the regional anatomy of the domestic mammals and to give practical anatomical knowledges about diagnosis, operation areas, general exenteration and similar applications comparatively.

The aim of the course is to teach the aetiology, epidemiology, pathogenesis, clinical signs, post-mortem findings, laboratory diagnosis, treatment and prevention of fungal diseases important in Veterinary MedicineIntroduction to topographic anatomy and regions of the body;Head regions-regiones cranii; frontal sinuses and their trepanations, horn, anaesthesia of the n. cornualis, general structures of the ear; Head regions-regiones faciei; nasal and oral cavities, application area of the nasal gastic catheter, planum nasolabiale, eyes and conjunctiva;Regio incisura vasorum facialium, areas to take pulse, trepanation area of the maxillar sinuses and important nerve blocking points;Neck regions (Regio colli dorsalis, Regio colli lateralis dextra et sinistra, Regio parotideae, Regio brachiocephalica, Sulcus jugularis);Neck regions (Fossa jugularis, Regio sternocephalica, Regio prescapularis, Regio colli ventralis, Regio laryngea, Regio trachealis), Anatomical structures of the eosophagotomy, laryngotomy and tracheotomy operation areas;Trunk, thorax, regio sternalis, sulcus pectoralis, regio costalis interscapular region, palpation of the ribs in the costal region, description of the lung and heart positions on the normal animals and lumbal region;Cranial and medial abdominal region; description of the important operation areas and internal organs in the cranial and medial abdominalregions and their anatomical structures on the normal animals;Caudal abdominal region; inguinal region in the caudal abdominal region and palpation of the mamma on the normal animals;Pelvis (Regio sacralis, Regio glutea, Regio tuberositatis coxae, Regio clunialis, Regio tuberositatis ischiadica);Pelvis (Regio radices caudales, Regio perinealis, Regio analis, Regio urogenitalis); perineal region and its clinical importance, anatomical structures of the urethrotomy operation area on the normal animals;Forelimb regions; the forelimb bones and joints on the normal animals, examination of the hoof, knee joint and ligaments on models, determine of the nerve blocking points;Hindlimb regions; the forelimb bones and joints on the normal animals, examination of the hoof, knee joint and ligaments on models, determine of the nerve blocking points.

Mycology (course type: elective; course code: NEUVET 345)

Course Objective: The aim of the course is to teach the aetiology, epidemiology, pathogenesis, clinical signs, post-mortem findings, laboratory diagnosis, treatment and prevention of fungal diseases important in Veterinary Medicine

Course content: Introduction to mycology, fungal agents and mycology science, classification, history and nomenclature of fungi; Macroscopic and microscopic morphologies of fungi; Nutrition and growth characteristics of fungal agents, sexual and asexual sporulation; Physical structure of fungal agents; Epidemiology of fungal diseases ; Cutaneous mycoses; Dermatophytosis, trichophyton, epidermophyton; Cutaneous mycoses; Dermatophytosis, trichophyton, epidermophyton; Subcutaneous mycoses; Rhinosporidiosis, Spirotrichosis; Systemic mycoses; Actinomykosis, Aspergillosis, Blastomycosis, Histoplasmosis, Candidiasis, Coccidiomycosis, Cryptococcosis, Nocardiosis; Systemic mycoses; Actinomykosis, Aspergillosis, Blastomycosis, Histoplasmosis, Candidiasis, Coccidiomycosis, Cryptococcosis, Nocardiosis; Systemic mycoses; Actinomykosis, Aspergillosis, Blastomycosis, Histoplasmosis, Candidiasis, Coccidiomycosis, Cryptococcosis, Nocardiosis; Systemic mycoses; Actinomykosis, Aspergillosis, Blastomycosis, Histoplasmosis, Candidiasis, Coccidiomycosis, Cryptococcosis, Nocardiosis; Mycotoxins; aflatoxin, ocratoxin, rubratoxin, sporodesmin; General principles of laboratory diagnosis of pathogenic fungal agents.

Feed Additives and Feed Legislation (course type: elective; course code: NEUVET 347)

Course Objective: Learning classification and definition of feed additives; Understanding the importance of feed additives in animal nutrition; Have information about efficacy, economy and aim of using feed additives in modern animal nutrition.

Course content : Introduction to feed additives. Definition and characteristics of feed additives. vitamins, fat soluble vitamins, water soluble vitamins, feed additives with nutritional value: Minerals, animal originated minerals, natural minerals synthetic minerals, chelates. Amino acids. Energy suppliers substances related to feed production and durability (antifungal and adsorbants substances). Substances related to feed production and durability (Antioxidant, pellet binders, emulgators). Substances affecting digestion (enzymes). Substances improving animal performance. Substances enhancing taste and flavour. Substances improving animal performance. Substances affecting digestion (probiotics and prebiotics). Substances improving animal performance. Substances affecting. Digestion (buffer, isoacids, ionophors, decreasing methan production, preventing tympany, defaunation, grids, stimulating salivation). Substances changing metabolism. (Hormones, Substances changing composition of carcass. Growth promoters: Antibiotics, substances used in chemotherapy, saponins. Substances affecting animal health: Drugs, environmental efficient substances, substances regulating immune system. Substances enhancing marketing power of animal products: Pigments. Other feed additives and the legal arrangements relating to the feed additives.

Year 3 (Semester 6)

Epidemiology (course type: compulsory; course code: NEUVET 302)

Course Objective: To teach the mode of action, transmission, dissemination, detection, and control and eradication of infectious diseases in animal populations.

Course content: Definition, aims and types of epidemiology ;Description of health and disease status, postulates and determinants of disease;Transmission and dissemination of infections;Infection types;Diseases in animal populations;Disease patterns within animal populations;Determination of disease frequency within animal populations;Spatial and temporal distribution of diseases;Ecology;Types of epidemiological investigation;Collection, quality and analysis of epidemiological data;Collection, quality and analysis of epidemiological data;Eradication and control methods of animal diseases;Eradication and control methods of animal diseases.

Helminthology (course type: compulsory; course code: NEUVET 304)

Course Objective: Teaching of Helminth species parasitized on cattle, sheep, goat, horse, cat, dog, pig and poultry; their development, epidemiology, pathogenicity, diagnose, treatment and control. Students must have these skills at the end of the lessons. Knowing the helminthes found in Ruminants, pigs, equids, carnivores and poultry. Learning the development of helminthes found in Ruminants, pigs, equids, carnivores and poultry. Learning the clinical signs and pathogenicity of larval/adult stages of Helminthes. Learning the economic losses due to helminthic diseases. Learning the diagnosing techniques of helminth infections on dead or alive animals and can apply them.

Course content: IntroductiontoHelminthic infections, harmful effects of these infections on animals and human. Situation of the helminth infections in Turkish Republic of Northern Cyprus and Turkey and their negative effects about on economic losses;General features of trematodes, morphology, development and their pathologic effects;Epidemiology of fasciolosis, morphologic and biologic features, diagnoses, treatment and control;Epidemiology of dicrocoeliosis and paramphistomiosis, morphologic and biologic features, diagnoses, treatment and control;Opistorchidae, heterophyidae, echinostomidae, schistosomidae species and diseases caused by them;General features of cestodes, morphologic and biologic features, diagnoses, treatment and control. Pseudophyllidae species and diseases caused by them;Anoplocephalidae species and diseases caused by them;Taenidae species and diseases caused by them;Davainidae, hymenolopidae, dilepididae, mesocestoididae species and diseases caused by them;General features of nematodes, morphologic and biologic features, Trichostrongylidae species and diseases caused by them;Strongylidae, ancylostomidae and syngamidae species and diseases caused by them;Metastrongylidae species, ascaridae, ascarididae species and diseases caused by them;Anisakidae, oxyuridae, theileziidae, trichuridae species and diseases caused by them.

Pharmacology II (course type: compulsory; course code: NEUVET 306)

Course Objective: To educate qualified students in the field of the drugs acting on the digestive system, locally on the skin, nutritional pharmacology and chemotherapy comprising

drug properties, effects, usage, and the scientific principles of correct and conscious administration of drugs

Course content: Drugs acting on the digestive system, ruminal pharmacology, laxatives, purgatives and antidiarrheal drugs; Drugs acting locally on the skin ; Nutritional pharmacology: minerals and vitamins ; General information about the autonomic nervous system drugs, mechanisms of action and classification of the autonomic nervous system drugs; Antiadrenergic adrenergic drugs and medicines, cholinergic and anticholinergic drugs; Sedative, hypnotic, anticonvulsant, tranquilizing and neuroleptic drugs, narcotic analgesics, antipyretic- analgesic - anti-inflammatory drugs; Characteristics of general anaesthetics, injectable, volatile liquids, gases or local anaesthetics, dissociative drugs, Neuroleptanalgesia; Effects on cardiovascular system and blood, drugs that increase blood volume, balance, body fluids, electrolytes, urinary system drugs, respiratory system drugs.

Food Hygiene and Technology (course type: compulsory; course code: NEUVET 310)

Course Objective: Food chemistry, sources of food contamination, food microbiology food infection and intoxication, principles of food preservation, hygiene of water and foods of animal origin, composition and microbiological spoilages of foods of animal origins.

Course content: Functions of proteins, lipids carbohydrates and water; Microorganisms in foods; Parasites, biological material, veterinary drug residues, toxic material in foods; Microbial contamination sources, contamination, intrinsic and extrinsic parameters effecting microbial growth in foods; Indicator microorganisms, indicators for food safety and sanitation, coliforms and faecal coliforms; Foodborne bacterial agents in infections and intoxications (*Salmonella* spp. pathogenic; *Escherichia coli*, *Shigella dysenteriae*, *Campylobacter* spp., *Vibrio cholera*, *Vibrio parahaemolyticus*, *Listeria monocytogenes*, *Yersinia enterocolitica*, *Staphylococcus aureus*, *Bacillus cereus*, *Clostridium perfringens*, *Clostridium botulinum*, other bacteria (*Aeromonas* spp., *Brucella* spp., *Coxiella burnetii*, *Mycobacterium tuberculosis*); Principles of food preservation (prevention of contamination, elimination of microorganisms, prevention of microbial growth – cold storage, freezing, high temperature applications, drying and concentration, addition of salt and sugar, high temperature applications, addition of preservatives, smoking, vacuum, controlled and modified atmosphere packaging, irradiation); Water hygiene: Importance of water, water requirement, cleaning of water, physical, chemical and microbiological properties of water, disinfection methods; Meat hygiene: Microbial spoilage in meat and meat products, anaerobic spoilage, aerobic spoilage; Meat hygiene: Microbial spoilage in different types of meat products (fresh meat, cured meat, fermented sausage, hamburger, canned meat); Poultry meat hygiene: Nutritional value of poultry meat, quality parameters in poultry meat, poultry slaughter, spoilage of poultry meat; Egg hygiene: Egg composition, spoilage of egg, examination methods of egg; Seafood hygiene: Post mortem changes in fish, rigor mortis, purification, properties of fresh fish; Milk hygiene: Microbial spoilage in milk.

Animal Nutrition and Nutritional Diseases (course type: compulsory; course code: NEUVET 312)

Course Objective: To teach; techniques of processing, preparation and using of forage and concentrate feed, basic principles of animal nutrition according to animal species and physiological periods. In addition, ruminants, poultry, turkeys, quail, cats, dogs, pigs, horses, rodents, and some exotic animals taught the basic principles of nutrition, feed ingredients and animal nutrition is aimed to obtain information about.

Course content: The gastrointestinal tract of monogastric animals and metabolism. the raw materials that are used in the production of poultry feed brief information; Nutrient requirements of broilers, basic knowledge of broiler nutrition in different physiological periods; Nutrient requirements of laying hens, basic knowledge of laying hen nutrition in different physiological periods; Observed in broilers and laying hens, nutritional diseases feeding disorders related to nutritional failures and feeds supply in metabolic disorders that can be formed depending on the aetiology, symptoms and precautions; Rodent (hamster, mouse, rabbit etc.) nutrition and basic information according to animal species, feed used in rodent rations; Exotic animal (water turtles, cage birds and ornamental fish) nutrition and basic information according to animal species, feed used in exotic rations; Basic information on calf and nutrient requirements of calves, calf nutrition (0 to 5 months age) ; Basic nutritional information on pigs, nutrient requirements of pigs, pig nutrition according to physiological periods, Basic nutritional information in horses, nutrient requirements of horses, horse nutrition according to physiological periods; Basic nutritional information on dry and lactation cows, their nutrient requirements, dry and lactation cow nutrition according to periods; Basic nutritional information on dry and lactation cows, their nutrient requirements, dry and lactation cow nutrition according to periods; Basic nutritional information in beef cattle, nutrient requirements; Basic nutritional information in sheep and goats, nutrient requirements, nutrition of lambs (breeding and fattening), sheep, goat and kids; Basic nutritional information in dogs and cats, nutrient requirements, commercial feeds for dogs and cats, dog and cat nutrition according to physiological periods.

Animal Breeding (course type: compulsory; course code: NEUVET 314)

Course Objective: To educate qualified students in field of improving cattle, sheep, goat and chicken breeds for getting maximum income for future management and market conditions.

Course content: The aim and targets of animal improvement, character, phenotype, genotype, environment; Variation, measuring the variation, the elements of phenotype and genotype variations; Degree of heritability and its properties, calculating degree of heritability, importance of the heritability degree on breeding; Selection, genetic effects of selection, generation interval and calculation of the genetic improvement ; Calculating the future improvement of genetic factors that affect the future improvement of genetic, remedies for increasing the productivity on selection; Repeatability and its properties, calculating the repeatability, the importance of the repeatability degree at breeding; Breeding value estimates; Selection according to individual phenotypic values, pedigree selection, selection according to family average, combined selection, family selection, sib selection; Progeny testing method and calculating the accuracy level of progeny testing, BLUP method; The importance of the phenotype and genotype correlations on the animal breeding. Calculating the coefficients of covariates, regression and correlation; Indirect selection, Texel selection method, independent culling levels method and index method; Pure-breeding, inbreeding, estimation of relationship

coefficient; Conversion crossbreeding, combination crossbreeding and commercial crossbreeding; Statistical elimination of the effects of some environmental factors on productivity traits.

Pathology II (course type: compulsory; course code: NEUVET 316)

Course Objective: To teach students the congenital abnormalities, circulatory disturbances, inflammations, infectious and parasitological diseases and tumours of gastrointestinal, respiratory and nervous systems, and also to teach the pathogenesis and macroscopic and microscopic changes made by these pathologies. At the end of the course the student is expected to have a general insight on the diagnosis, treatment and prophylaxis of the diseases of these systems.

Course content: Introduction to recommended books. Oral cavity, superficial and deep inflammations of the oral cavity; Vesicular, erosive and ulcerative inflammations of the oral cavity; Plague of small ruminants, MCF, necrotic and bacterial stomatides, neoplastic diseases; Neoplastic developments of oral cavity, dental abnormalities and salivary glands; inflammation, parasitological and neoplastic diseases of oesophagus; Rumenitis, acidosis, parasitological and neoplastic diseases of fore stomachs. Stomach, abomasum related diseases: dilatation, displacement, foreign bodies, vascular disturbances and inflammations; Intestines and introduction to vascular disturbances and enteritis. Inflammation of small enteritis and examples to bacterial, viral, mycotic and parasitological enteritis; Large intestine and diseases. Liver and bile ducts, pancreas, periton and abdominal cavity, tumours; Nasal cavity and sinuses, inflammations, circulatory disturbances and inflammations of larynx and trachea, air sacs and inflammations, pathology of bronchi and bronchiole, alveolar response to pathogens, bronchopneumonia: lobular, lobar, interstitial, granulomatous; Bacterial, viral, parasitological and other pneumonias, neoplastic diseases of lungs, pathology of pleura and thoracic cavity; Macroscopic and microscopic recognition of nervous system malformations, cause and pathogenesis. Special viral diseases causing malformations in the nervous system and their differential diagnosis. Pathological changes in nervous the nervous system cells and vascular disturbances; Pathogenesis, aetiology, macroscopic and microscopic changes in the malacias and spongiform encephalopathies and classifications of nervous system inflammations according to their macroscopic and microscopic characteristics; Important viral disease of nervous system (rabies, distemper, visna, borna disease etc.) Macroscopic and microscopic recognition of bacterial and parasitic disease of nervous system and their differential diagnosis.

Protozoology (course type: compulsory; course code: NEUVET 318)

Course Objective: Teaching and having skills of protozoans infect human, cattle, sheep, goat, dog, cat, pig and poultry; also identification, diagnose, treatment and control of them; Students must have these skills at the end of the lessons: ; Identification of protozoans having problem in human and animals as in genus or species if needed; Correct Interpretation on diagnose of the important protozoan infections with the help of clinical, laboratory and necropsy findings; Knowledge based interpretation on prognosis of the identified disease;

election of correct therapeutics in treatment. Knowing about the control types of epidemic protozoan diseases.

Course content: Morphology, physiology, taxonomy of Protozoons;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Amoebiosis;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Giardia, Hexamita and Histomonas;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the class of Trichomonadida;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Leishmaniosis;Development, pathogenicity, symptoms, diagnose, treatment and controlmeasures of the causative species of Trypanosomiosis ;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Eimeriosis;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Isosporiosis;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Sarcocystiosis;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Toxoplasmosis and Neosporiosis;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Cryptosporidium, Besnoitia, Hammondia and Hepatozoon;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Theileriosis ;Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Babesiosis Development, pathogenicity, symptoms, diagnose, treatment and control measures of the causative species of Plasmodium, Leucocytozoon and Haemoproteus.

Animal Breeding II (course type:compulsory; course code: NEUVET 320)

Course Objective: To educate qualified students in the field of theoretical and practical breeding principles of cattle, sheep, goat, horse breeding.

Course content: Cattle breeding in Turkey,Cyprus and the World, position of cattle in zoological system, the morphological and physiological characters of main cattle breeds in the world and Turkey,Cyprus;Selection of dairy cow and sire, breeding value, breeding index, Type scoring and body condition scoring, Type scoring of bull,transport, dairy cow welfare;Dairy cattle breeding techniques, records and production controls, insemination, reproduction, calving, herd management;Calf, steer, heifer and cow management, management before and after calving, calves at birth, care, nutrition, numbering, horn prevention, care in heifers receiving more of the nipple-feeding, the first title in heifers, dry period, lactation;Beef cattle breeding, fattening the benefits of feeding methods, breeding techniques, fattening period, fattening performance, the performance influencing factors, race, age, gender, body structure, origin, condition, fattening weight, nutrition, maintenance, shelter-related factors, slaughter and carcass characteristics;Economic importance of sheep breeding and discussing main problems.Sheep and goat farming in Turkey, the main problems and solutions;The morphological and physiological characters of main sheep breeds in the world and Turkey (milk yield, fertility, growth, yield and properties of wool, live weight) Sheep breeding objectives and selection criteria;Herd management and welfare in sheep breeding, housing conditions and transportation, (mating period, pregnancy, lambing and

suckling period, lactation period,);Lamb production systems in sheep breeding: Stars and camel techniques, Milk and wool productions and factors affecting these productions;The morphological and physiological characters of main goat breeds in the world and Turkey, goat breeding systems, selection criterias;Management in goat breeding, records, selection, goat houses and biosecurity. In goat herd management; fertility, records, selection and crossbreeding planning, adaptation, mating, pregnancy and hosting, and health protection in goats milk, meat and mohair production, goat's milk, milking and hygiene;Horse breeding, importance of horse breeding and systematic, horse breeds in the world and Turkey take place in the zoological system, foal management, mare management, stallion management, management of horse farms, horse pasture maintenance and management;Equine reproduction and fertility .Managing race horse breeding, records, selection, grooming and horses condition;Horse behaviours and educations, Parent determination in horse breeding.

Biostatistics (course type:compulsory; course code: NEUVET 322)

Course Objective: To provide students with the necessary knowledge that enables them to confidently design their own research, incorporating the appropriate statistical methods and analyse the results of published research. Additionally, the course will allow students to become familiar with the best practices related to presenting data and analysis results.

Course content: Introduction to Statistics;Data types, recording, accuracy and precision;Analysing and presenting measures of central tendency;Analysing and presenting measures of data variation;Data distributions, kurtosis, skewedness and frequency analysis;Pearson's r correlation;Linear and curve linear regressions;Students t test;Analysis of variation (ANOVA);Chi squared analysis;Non-parametric tests;Presenting data and analysis results;Experimental design Publishing research.

Introduction to Clinical Medicine(course type:compulsory; course code: NEUVET 324)

Course Objective: Clinical courses approach the start of animals captured - I raptor methods and methods of clinical examination is basic information about the theoretical and practical transfer. For this purpose, internal medicine, all the basic principles of the system of inspection; Obstetrics and Gynaecology, the basic principles of the female genital tract examination; Surgery introduction to the basic principles of operation and external disease transfer students. This information is to be utilized by the student gains the ability to use in future training sessions and professional life.

Course content: Approach to the animals, keep-binding and deposit methods, asepsis, antisepsis, sterilization, patient preparation for the operation, the operation preparation of the surgical team;Surgical instruments, biomaterials, haemorrhage, haemostasis, suture materials, sewing techniques;Injection, puncture, catheterization;Dressing, bandages, drainage;Overall, clinical and special methods of examination and diagnostic methods;Examination of the digestive system;Examination of the digestive system;Respiratory system

examination;Examination of the urinary and circulatory systems;The anatomy of the female organs genital;Examination of the female genital organs;The tools and materials used in reproductive examination;Memorandum methods for raptor reproductive examinations in different animal species.

Year 4 (Semester 7)

Bee Diseases (course type: obligatory; course code: NEUVET 403)

Course Objective: Having the skills of the knowledge about basic beekeeping, livestock criteria, bee diseases and pests, diagnose and treatment of their diseases.

Course content: Anatomy, morphology, taxonomy, biology and races of honey bees. Terms, equipment, usage, hive management and interpretation criteria. Relationship between beekeeping and environment; pollination and economical importance. Bee products (honey, pollen, propolis, apilarnil, bee venom, bee wax, royal jelly).Introduction to honey bee diseases and their general features. Varroosis (from diagnose to treatment).Nosemosis (from diagnose to treatment).American and European foulbrood disease (from diagnose to treatment).Bee paralyze, Sac brood disease, Stone brood disease, septicaemia, dysentery (from diagnose to treatment).Fungal diseases of honeybees (from diagnose to treatment).Wax moth of honeybees (from diagnose to treatment).Tracheal mite (*Acarapis woodi*), Bee louse (*Braula coeca*) and *Tropilaelaps clarea* infestations (from diagnose to treatment). Official regulations of beekeeping in Turkey.

Meat Inspection and Technology(course type: obligatory; course code: NEUVET 405)

Course Objective: In meat inspection part, structure of slaughterhouses, transport of slaughter animals, types of slaughter, systematic meat inspection, bacterial, viral and parasitic diseases encountered in meat inspection, decision on meats based no pathological findings and based on legal requirements are aimed to be taught. In meat products technology part, teaching of post-mortem changes occurring after slaughter, preservation methods of meats, processing Technologies of meat products, cleaning and disinfection methods in meat processing plants are aimed.

Course content: Introduction to course, introduction to course material, legal regulations in our country related to red meat processing, required recorded documents in slaughterhouses, responsibilities of the slaughterhouse, documents required fort the slaughter of animals.Official documents required for transport of slaughter animals, classification of slaughterhouses, parts of slaughterhouses savage in slaughterhouses. Ante mortem inspection and its importance, resting of animals before slaughter, method of stunning, slaughter of cattle, sheep, goat and pigs, obligatory slaughter, determination of slaughter after death, types of stamps. Systematic meat inspection of cattle, sheep, pigs: blood, hide, head, lung, liver, spleen, intestine, bladder, udder, genital organs. Ante mortem and post-mortem findings and decision in slaughter animals for anthrax, tuberculosis, brucellosis, paratuberculosis, *C.chouvei* infection, tetanus, pasteurellosis, tularemie. Ante mortem and post-mortem findings and decision in slaughter animals for actinomycosis, actinobacillosis, salmonellosis, rabies, scrapie, contagious bovine pleuropneumonia, contagious capri pleropneumonia, aphtous

fever, blue tongue, leucosis, BSE. Findings and decision in conditions such as septicaemia, toxæmia, pigmentation, jaundice, abscess, hematoma, cachexia, caseification uraemia. Findings and decision in parasitic infections such as cysticercosis, trichinellosis, distomatosis, coenurosis, echinococcosis, trichostrongyloidosis, toxoplasmosis, sarcosporidiosis. Carcass deboning, pH changes observed after slaughter, rigor mortis and meat maturation, DFD, PSE meats, cold shortening, thaw rigor, artificial maturation of meats. Cooling, cold storage, freezing and heating in meat preservation. Principle applications used in meat processing and classification of meat products, methods of drying and smoking. Selection of meat in fermented meat processing, preparation of sausage batter, filling, main points in fermentation, pastrami production technology. Selection of meat in sausage-salami production, important points in preparation of emulsion, heating and smoking processes. Cleaning and disinfection in meat processing plants.

Animal Health Economics And Management(course type: obligatory; course code: NEUVET 407)

Course Objective: Basic economic concepts structure of relations with its cattle breeding and selection of livestock economy where the economic characteristics. The relationship among the supply and demand for animal products, teaches marketing and organization in the livestock sector.

Course content: Introduction of economy. Livestock and scope economies. Basic macro-economic issues. Factors affecting supply and supply concepts in animal products. Factors affecting demand and demand for animal products. Facility location and selection of livestock enterprises. Feasibility study of the livestock business. Input supply and production in the livestock business. Marketing and organization in the livestock sector. Turkey animal products marketing channels. Organization in the livestock sector. Livestock policies in Turkey. Livestock policies in Cyprus. Evaluation of the course.

Poultry Diseases (course type: obligatory; course code: NEUVET 409)

Course Objective: The identification of infectious diseases of poultry, poultry seen in bacterial, viral and parasitic aetiology of mycotic diseases, epidemiology, symptoms, laboratory diagnosis, treatment methods, providing general information about the protection control methods. Giving information about conditions in the field and laboratory practices for diagnosis. Poultry be given to the students the basic methods used in the laboratory diagnosis of the disease and making the application, the importance of vaccination for the protection of birds, routes of administration and vaccine be given basic information is intended for monitoring the follow-up and students enabling them to make comments.

Course content: Introductory remarks of the course. Salmonella infections; *Salmonella Gallinarum* (fowl typhoid), *Salmonella Pullorum* (Pullorum disease), and Paratyphoid infections. *Escherichia coli*, coryza, fowl cholera and infections. Mycoplasma infection. Campylobacter and Clostridium infection. Streptococcus, Staphylococcus, tuberculosis and poultry infections. Chlamydia and Ornithobacterium infection. Newcastle Disease (ND) and Marek's Disease. Infectious Bursal disease in poultry and Leucosis.

Epidemic Tremor and Egg Drop syndrome. Flower Chicken and Chicken infectious anaemia. Reovirus infection of Poultry and Avian influenza infection. Fungal infections of poultry. Parasitic infections of poultry. Serotyping, antibiotic and vaccination.

Necropsy (course type: obligatory; course code: NEUVET 411)

Course Objective: The course aims to teach proper necropsy technique, the evaluation of necropsy findings, sampling, preservation and transport of samples.

Course content: Post mortem examination, the aim and general principles of necropsy. Equipment used for necropsy, euthanasia, euthanasia principles and techniques. Death and marks of death, algor mortis, rigor mortis, post mortal coagulation, post mortal hypostatic congestion. Imbibition, palor mortis, autolysis and putrefaction. External and internal examination in necropsy, positioning in necropsy, removal of the skin and dearticulation of the extremities. General necropsy techniques, opening abdominal and thoracic cavities and pelvis. Taking out and examining organs. Necropsy in ruminants, Necropsy of equidae, Necropsy of dogs and cats, Necropsy in poultry, Necropsy in laboratory and some wild animals. Selecting and sampling of necropsy material and biosecurity of transportation. General diagnosis, diagnosis, determination of death causes.

Pathology III (course type: obligatory; course code: NEUVET 413)

Course Objective: To teach the students the aetiology, pathogenesis, macroscopic and microscopic changes in congenital anomalies, circulatory disturbances, inflammations, infectious and parasitological diseases and tumours of cardiovascular, hematopoietic, endocrine, urinary, male and female genital, muscular and dermatologic systems in domestic animals. The student is expected to have a general insight on these diseases, to form an infrastructure for the understanding of the diagnosis, treatment and prophylaxis of the diseases of these systems, and also to be able to express lesions of these systems orally and in written.

Course content: Abnormalities of the heart and vessels, diseases of pericardium, myocardium and epicardium. Diseases of arteries. Diseases of veins and lymph vessels. Diseases of blood cells and lymphomas. Diseases of thymus, lymph nodes and spleen. Diseases of muscles. Post mortal changes, abnormalities and circulatory disturbances of kidney; degenerative and inflammatory diseases of glomeruli. Diseases of tubuli, interstitial area diseases, urolithiasis and diseases of vesica urinaria. Abnormalities of genital system organs, diseases of ovaries and salpinx, non-inflammatory diseases of the uteri and certain inflammatory diseases. Diseases of the pregnant uterus and foetus. Bacterial and parasitological abortions. Viral, bacterial, protozoal and fungal abortions, diseases of cervix, vagina and vulva. The terminology in defining skin lesions, congenital and genetic disorders, lesions from mechanical injury, burns, freezing, solar dermatitis, photosensitization. Nutritional, immune mediated and endocrinal skin diseases. Skin tumours, parasitological, viral, bacterial and fungal diseases of skin.

Aquaculture And Disease (course type: obligatory; course code: NEUVET 415)

Course Objective: Students were informed about the basic principles of aquaculture, students bacterial fish with breeding, viral, fungal, parasitic or neoplastic diseases, the aetiology of nutritional and metabolic disorders and poisoning, epidemiology, pathogenesis, the protection and control subjects with laboratory diagnosis is aimed to be knowledgeable.

Course content: Cultured consciousness of living (rainbow trout, sea bream, sea bass, shrimp, mussels, clams) basic biological and physiological characteristics. The basic principles of rainbow trout farming, the basic principles of sea bream farming, and the basic principles of sea bass fish farming. Shrimp, mussels, oysters, crayfish and lobster breeding of the basic principles. Systematic examination methods of fish disease. Inspection of live fish, post-mortem examination of fish, external inspection of the fish, examination of internal organs of fish. Submission of labs and diseased patient samples of fish tissue samples for diagnosis of fish diseases. Bacterial fish disease ; furunculosis , Columnaris disease, peduncle disease (cold water disease), bacterial gill disease, bacterial gill disease aetiology, epidemiology, pathogenesis, clinical and autopsy findings , microbiological, diagnosis , treatment, prevention and control. Bacterial diseases; bacterial kidney disease, bacterial haemorrhagic septicaemia, vibriosis , tuberculosis , pasteurellosis the aetiology, epidemiology, pathogenesis, clinical and autopsy findings, microbiological diagnosis, treatment, prevention and control. Bacterial diseases, enteric red mouth disease, streptococcosis lactococci of epidemiology, pathogenesis, clinical and autopsy findings, microbiological diagnosis, treatment, prevention and control. Viral diseases; viral haemorrhagic septicaemia, infectious pancreatic necrosis, infectious haematopoietic necrosis, spring viremia of carp in the aetiology, epidemiology, diagnosis, prevention and control. Viral diseases; infectious salmon anaemia, swim bladder inflammation, scarlet fever pike , channel catfish disease, cauliflower disease the aetiology, epidemiology, diagnosis, prevention and control. Nutritional seen in fish, toxic, and some non-infectious diseases. Fungal diseases; saprolegniasis, ihtiyosporidiosis, mycosis, shellfish and press the pathogenesis, clinical and autopsy findings, prevention and treatment.

Milk Hygiene And Technology(course type: obligatory; course code: NEUVET 417)

Course Objective: To gain experience on the topics of hygienic milk production, dairy microbiology, milk borne infections, milk contaminants, dairy production technologies, quality control applications, related legal regulations, dairy plant management and improving the practicing skill.

Course content: Introduction to the course, presentation of reference books and the course plan, general information on dairy sector in our country and in the world, definition, formation, composition of milk, and the factors effecting its composition. Safe and hygienic milking, storing of milk, transport to milk processing plants and. Chemistry of milk (milk fat, protein, sugar, vitamin and minerals, enzymes), its importance in human nutrition. Microbiology of milk and dairy products, natural flora of milk, contaminants in dairy technology, general microbiology of drinking milk, yogurt, cheese, milk powder and butter. Infections and intoxications linked to the consumption of dairy products and the contaminants (antibiotics, disinfectants and metallic residues). Introduction to milk industry, analyses applied to milk in the plants (clarification, bactofugation, homogenization and standardization), drinking milk technology (pasteurized and UHT milk technology). Importance of starter cultures in milk industry, preparation methods of starter cultures, starter

culture types, quality defects and bacteriophage. Yogurt technology: fruity yogurt, defects and methods of prevention, quality control, suitability to Turkish Food Codex, ayran and other fermented milk (kefir, koumiz) technologies. Feta cheese technology, quality defects in feta cheese and prevention methods, quality control, suitability to Turkish Food Codex and Standard. Traditionally produced cheese varieties (Mihalic cheese, Kashar cheese, tulum cheese, dil and örgü cheese), quality defects in traditional cheese and prevention methods, and suitability to Turkish Food Codex. Technologies of some famous foreign cheeses (Edam, Gouda, Swiss Emmental, Gruyere, Cheddar, Roquefort, Mozzarella, Camembert and Brie). Butter technology; kitchen type and pasteurized (breakfast) butter technology, quality defects in butter and prevention methods, quality control, and suitability to Turkish Food Codex. Dried milk technology: quality defects in powdered milk and prevention methods, quality control of milk powders, and suitability to Turkish Food Codex. Cleaning and disinfection methods in dairy plants, personnel and plant hygiene, disinfectants and their importance used in dairy plants, bacteriological control methods.

Public Health in Veterinary Medicine (course type: obligatory; course code: NEUVET 419)

Course Objective: The following subjects are aimed to gain for the students: food safety from farm to the table, control-prevention and rules in low related to zoonoses, food borne diseases food and chemical originated intoxication, properties of production and selling stores and checking procedures in food related areas. Main pollutants, their importance in public health, nature and other living things, protection and measures for health.

Course content: Introduction to veterinary public health, aims of veterinary public health, services of veterinary public health. Food safety, quality, risk analysis, risk evaluation, risk communication, basic concepts of food quality, the relation of food hygiene and veterinary public health. Concept of food safety from farm to fork, animal health, welfare, animal wastes, meat testing, traceability, food additives and public health relation. Food derived diseases, protection ways from food poisoning and chemical derived food poisoning. Food control services in Turkey and in European Union, EU food authority, white document, farm animals registration system, custom systems, legal arrangements on veterinary public health. General principles required in food production and marketing places. Classification of zoonoses, epidemiology, control-prevention and legal arrangements related to these diseases. Other bacterial zoonoses, epidemiology, control-prevention and legal arrangements. Epidemiology, control-prevention and legal arrangements on viral and mycotic zoonoses and general approaches on control of zoonoses. Epidemiology, control-prevention and legal arrangements on parasitic zoonoses. Basic concepts of environment- food pollution, reasons of environment-food pollution and its general effects. Pollutants in food, their properties, effects on living things, remains, explanation of food pollution on human and animals. Responsibilities of veterinary surgeons in use of medicine, tolerance rate of medicine and other chemicals. Observation of environmental and food pollution, warnings stated by FDA, WHO, and Food Codex, ways of prevention and control of wastes.

Veterinary Legislation and Ethics (course type: obligatory; course code: NEUVET 421)

Course Objective: Legal duty of veterinarians, authority and responsibility and give adequate information about the students oriented to the veterinary legislation. Veterinary medicine in the field of professional ethics and to contribute to the decision making process necessary-sufficient by giving information on ethics.

Course content: Deontology Concepts and Approaches, in Veterinary Medicine Ethics. Legislation - Basic concepts, Hierarchy of Norms, the Constitution, the law / decree, regulation, Regulation, Directive definition, evaluation aspects of veterinary legislation constitutional. Legal framework for the implementation of the veterinary profession, the role of veterinarians - powers and responsibilities. Private veterinary practices in the framework of veterinary legislation. Surgeries, clinics and animal hospitals legislation. Public health and veterinary legislation. Disciplinary offenses and penalties. Animal protection and animal rights animal welfare and veterinary legislation. Ethical concepts and approaches. Veterinary ethics: animal (patient), animal (patient) with the evaluation of the relationship with the veterinarian community. Deontology and ethical differences. Basic Ethical Principles: Autonomy Policy, Utility Policy, Harm Principle, Justice Policy. Veterinary medicine is the ethical problems arising in practice - Ethical decision-making processes and solutions. Case study.

Veterinary Toxicology and Environmental Protection(course type: obligatory; course code: NEUVET 423)

Course Objective: To educate qualified students in the field of properties of poisons and prophylaxis, symptoms, diagnosis, and treatment of poisonings.

Course content: Toxicology, concepts of poison and factors of affecting toxicity. Properties and their metabolisms of poisons. General causes of poisonings and diagnosis. Taking samples in poisonings and general therapy methods. Poisonous plants: Alkaloids. Poisonous plants: Glycosides and other poisonous plants. Mycotoxins and poisonous mushrooms. Poisonous animals, inorganic poisons: Acids, bases, ammonia, ammonia compounds and urea, antimony, arsenic. Inorganic poisons: Copper, barium, mercury, fluor. Inorganic poisons: Cadmium, lead, molybdenum, nitrate, nitrite, selenium, sodium chloride. Pesticides: Insecticides. Pesticides: Rodenticides, herbicides, fungicides and molluscicides. Industrial poisons, poisoning with drugs. Euthanasia.

Cat-Dog Breeding (course type: elective; course code: NEUVET 461)

Course Objective: Students dog and cat breeding, behaviour, breed, shelter and teach breeding and domestication of topics.

Course content: History of pet dog. Dogs temperament and sensory properties. Classification of dogs. Dog breeds and their characteristics according to class. Dog breeds and their characteristics according to class. Dog breeds and their characteristics according to class. Dog shelters. Genetic and hereditary diseases. Prohibited dog breeds. Reproductive behaviour

in dogs. Dog nutrition. Cat breeding, body structure and history. Cat behaviour and reproduction. Cat breeds.

Year 4 (Semester 8)

Surgery I (course type: obligatory; course code: NEUVET 406)

Course Objective: Students in small animals, large animals and exotic animals in general surgery is based on the medicine next to acquiring theoretical knowledge to surgery and of course at the end of the theoretical knowledge of the light, by supporting students in clinical practice, and training aimed to gain these skills in both advanced vocational period.

Course content: Fluid and electrolyte balance, acid-base balance and disorders. Shock (Hypovolemic, Septic, Obstructive and Cardiogenic) and treatment principles, haemorrhage, haemostasis, dressing, drainage, inflammation, abscesses. Atrophy, hypertrophy, hyperplasia, dilatation, diverticulum. Tumour, metastasis, cyst. Wound and cicatrization, wound types. Bruises, ulcer, gangrene, necrosis. Fistula, phlegmon, burns and frostbite. Phlebitis, aneurysm, lymphangitis, lymphadenitis. Oedema, collectio sero sanguine, haematoma. Stenosis, hernia, bursitis, myositis, muscular rupture. Tendinitis, tendovaginitis. Arthritis. Neuritis, paralysis.

Obstetrics and Gynaecology I (course type: obligatory; course code: NEUVET 408)

Course Objective: To present method and equipment of obstetrics and gynaecology interventions in field. To give necessary knowledge about obstetrics. To contribute anatomophysiological and clinical knowledge for future courses.

Course content: Introduction to Obstetrics and Gynaecology. Importance of obstetric and gynaecology in veterinary medicine. Anatomy of genital tract and effect of genital tract during parturition. Puberty, sexual cycles, and hormonal mechanism in ruminants, horses, dogs, cats and swine. Clinical symptoms of sexual behaviour in the sea animals. Classifications of hormone and mechanism of hormonal effects in ruminants, horses, dogs, cats and swine. Doses and application of hormones. Physiology and endocrinology of pregnancy, embryology, placentation, in ruminants, horses, dogs, cats and swine. Pregnancy diagnosis (abdominal, rectal palpation and ultrasonography diagnosis), hormone measurements during pregnancy. Feeding and management of pregnant animals. Pathology in pregnancy period, foetal and maternal disorders. Abnormalities of foetal membranes. Abnormalities of pregnant animals due to pregnancy. Physiology and endocrinology of parturition. Stages of parturition. Examinations during pregnancy (inspection, vaginal examination, rectal palpation, ultrasonography and radiologic examination, endocrine diagnosis, endoscopic examination). Dystocia, foetal or maternal dystocia. General causes of dystocia, normal presentation and positions during parturition, Pathologic presentation and positions. Assistance to birth. General inspection before assistance, equipment needed for assistance, extraction force, C-section, foeto to my operation. Postpartum care of mother and calf, postpartum examination of cows. Postpartum haemorrhage.

Small Animal Internal Medicine I (course type: obligatory; course code: NEUVET 412)

Course Objective: To give advanced information on the physiology, physiopathology, diagnosis and treatment of cardiologic, endocrinologic, dermatologic, immune-mediated, neurologic and oncologic diseases in small animals. Discussing about the developments and changes based on the actual literatures. Keeping student's participation level high to the course with presentations given by students.

Course content: Special treatments for dermatologic diseases: antibacterial treatment, hyposensitization, immunomodulation, antihistaminics. Diagnosing and treatment of immune-mediated diseases: Pemphigus complex. Discoid lupus erythematosus, systemic lupus erythematosus, erythema multiforme, toxic epidermal necrolysis, vasculitis. Interactive presentations of dermatology. Muscle diseases: Myasthenia gravis, dermatomyositis, idiopathic myositis, protozoal myositis, metabolic myopathies. Clinical and diagnostic approaches to small animals suffering seizure. Primary epilepsy, canine granulomatous meningoencephalitis, feline ischemic encephalopathy, feline spongiform encephalopathy. Diagnostic approach into dermatological diseases, pruritis in dogs and cats, alopecia in dogs and cats. Lymphoma, systemic mast cell diseases, bone marrow diseases, renal disease anemia, blood transfusion treatment. Pituitary gland and hypothalamus diseases, adrenal gland diseases; Pancreatic endocrinal diseases, hypo-hyperthyroidism, hyper - hypoadrenocorticism, diabetes mellitus, hypoglycaemia. Septic shock (Endotoxemia) and disseminated intravascular coagulation (DIC). EKG (Morphologic cardiologic diseases, influence of systemic diseases on EKG), Hypertension, Systolic and diastolic insufficiencies and their diagnosing and treatment, pulmonary oedema, thromboembolism, congenital heart defects. Feline hypertrophic cardiomyopathy, pericardial and pleural effusion, ascites.

Large Animal Internal Medicine I (course type: obligatory; course code: NEUVET 420)

Course Objective: Students teaching for cattle, sheep, goats and pigs digestive system, circulatory system and blood diseases, infections and diseases related to these systems. This course will enable the students to be able to diagnose the clinical level, considering the differential diagnosis of diseases related to these issues, to make the treatment and preventive measures are expected to learn them to take and they are targeted for applications in professional life.

Course content: Evaluation of the history of the farm animals, stomatitis and related infections; alum, rinderpest, sheep and goat plague, Blue tongue, ecthyma, CGB, BVD. Pharyngitis, aktinobasillosis, pharynx stroke, oesophageal stenosis, oesophageal obstruction, megaesophagus. Diseases of pre-stomach of ruminants: front gastric diseases of calves, simple indigestion, acute rumen acidosis, subacute and chronic rumen acidosis, rumen putrefaction. Tympany, RPT, the vagus indigestion, ruminal collapse, I retikuloomasiku oocyte's obstruction, omasum constipation the ruminal drinking. Abomasum tympany of abomasal ulcers, abomasal displacement. Enteritis and diarrhea in calves; colibacillosis, rotaviral diarrhea and coronaviral, cryptosporidiosis, coccidiosis, lamb, goat and diarrhoea in piglets, food diarrhoea, salmonellosis, winter dysentery, paratuberculosis, paralytic ileus, liver disease of ruminants. Digestive system diseases Horses: Pains and diseases are: pain, gastric dilatation, duodenitis-proximal jejunitis, small bowel obstruction, colon, obstruction, sand

pain, pathological condition changes, acute hepatitis, and chronic hepatitis. Important diseases of the digestive system of pigs, the overall assessment in the diagnosis of pre-stomach disease, rumen Hypoactivity, simple food indigestion. Of traumatic pericarditis, sinus bradycardia, dehydration and peripheral circulatory failure. Anaemia, blood coagulation disorders, anthrax. Haemoglobinuria associated with the disease: leptospirosis, bacillary ikterohemoglobinur of babesiosis, theileriosis. Anaplasmosis enzootic bovine leukosis, pseudotuberculosis, copper poisoning, salt poisoning. Respiratory system disorders: rhinitis, sinusitis, laryngeal obstruction, laryngitis and tracheitis, pneumonia, aspiration pneumonia, pulmonary emphysema, goat liver pain. Rhinitis horses, epistaxis, bacterial pneumonia, interstitial pneumonia, pleuropneumonia, exercise-induced pulmonary hemorrhage (EIPH), chronic obstructive pulmonary disease (COPD), gurgar, glanders, influir France, herpesvirus infections, viral artheritis, infectious anemia. Pleuritis, pneumothorax, tuberculosis, pasteurellosis, enzootic pneumonia, goat liver pain, IBR, swine pasteurellosis.

Wild Animal Rehabilitation (course type: elective; course code: NEUVET 462)

Course Objective: To give information to students about the wild animal's care, feeding conditions, how to hold, examination, sample collection methods and their important diseases, diagnosis – treatment procedures, drug administration techniques and their rehabilitation.

Course content: Birds of prey: Their care, feeding, housing/ intensive care requirements. Birds of prey: General clinical examination, diagnostic and treatment methods. Birds of prey: Major diseases that may be encountered and their treatment options. Birds of prey: Examining the rehabilitation processes of the treated birds and procedures of releasing back to nature. Reptiles: Their care, feeding, housing/ intensive care requirements. Reptiles: General clinical examination, diagnostic and treatment methods. Reptiles: Major diseases that may be encountered and their treatment options. Reptiles: Examining the rehabilitation processes of the treated reptiles species and procedures of releasing back to nature. Terrestrial carnivores: Their care, feeding, housing/ intensive care requirements. Terrestrial carnivores: General clinical examination, diagnostic and treatment methods. Terrestrial carnivores: Examining the rehabilitation processes of the treated animals and evaluating the procedures of releasing back to nature. Small mammals: Their care, feeding, housing/ intensive care requirements. Small mammals: General clinical examination, diagnostic and treatment methods. Small mammals: Their important diseases and procedures of releasing back to nature after rehabilitation.

Year 5 (Semester 9)

Forensic Medicine (course type: obligatory; course code: NEUVET 501)

Course Objective: Both the court, how to do the transfer of the necessary professional knowledge to illuminate the existing problems in an unbiased manner in Veterinary concern about legal issues and to emphasize how both parties should be taken to forensic cases.

Course content: Know the personality of the criminal law related materials; Know the person's relationship with the judge and the parties; Animal investigation of errors occurring during examination and surgical interventions; Doctors neglect investigation and veterinarian's responsibilities; Dose errors, errors in medication administration, medication

errors due to writing and practice in consideration of animal species; Death information in terms of veterinary forensics; Asphyxia deaths; Macroscopic lung testing; Judicial approach to wound occurs in animals; Doping of racehorses.

Foot Disorders And Shoeing Technique (course type: obligatory; course code: NEUVET 503)

Course Objective: This lecture provides students with technical and applied basic knowledge and understanding about hoof and claw health, care, disorders and diseases and their treatment methods including shoeing and prevention in cattle and horses in order to minimize economical losses due to foot diseases.

Course content: Introduction and economic losses related with hoof diseases in cattle; Functional foot anatomy and properties of normal cattle claw; Lameness examination and scoring in cattle; Claw deformations and functional hoof trimming in cattle; Infectious foot diseases in cattle (foot rot, digital and interdigital dermatitis etc.); Non-infectious foot diseases in cattle (Pododerma diseases and laminitis); Prevention of foot diseases in cattle and hoof baths; Anatomy and physiology of the horse foot, periodical hoof care, horse shoes and shoeing technique, relation of veterinarian and farrier with respect to hoof disorders in horses; Conformation faults (congenital and developmental faults of extremity and hoof stance and their corrective shoeing methods); Wounds and cellulitis of the coronet, fistulas and ossification of the hoof cartilages, circumscribed pododermatitis (definition, etiology, clinical signs, diagnosis, treatment methods and shoeing); Laminitis in horses (definition, etiology, pathogenesis, clinical signs, diagnosis, treatment methods and shoeing based on course of the disease); Caries (foot rot) and narrowing of the frog and bulbs, sheared heels (definition, etiology, clinical signs, diagnosis, treatment methods and shoeing); Penetration of foreign bodies into the sole, hoof nail penetration and pressure, hoof abscess (definition, etiology, clinical signs, diagnosis, treatment methods and shoeing); Horn cracks (definition, classification, etiology, clinical signs, diagnosis, treatment methods and shoeing).

Surgery II (course type: obligatory; course code: NEUVET 505)

Course Objective: To teach the principles of surgery, surgical diagnosis and examination methods, definition of diseases, treatment and operation technique in small, large and exotic animals.

Course content: External ear canal diseases (otitis externa) and surgery; Middle and inner ear diseases (otitis media and interna) and surgery; Oral Cavity, oropharynx, oesophagus and stomach surgery; Small and large intestinal surgery, perineal surgery, liver surgery; Abdominal cavity and laparotomy, abdominal exploration; Celiotomi, umbilical, abdominal, inguinal, scrotal, femoral hernias, peritonitis and peritoneal effusions; Lymphadenectomy, splenectomy, splenic torsion-neoplasm; Testes and epididymis, penis and prepuce, prostate surgery; Urinary tract physiology, kidney, ureter, bladder and urethral surgery; Rhinotomy, tracheotomy, tracheostomy, elongated soft palate, everted laryngeal saccules, laryngeal collapse-paralysis, tracheal collapse, nasal tumours, nasal aspergillosis; Thoracocentesis,

chest tube placement, diaphragmatic hernias, pericardial hernias, pneumothorax, pleural effusion, chylothorax, thymomas, thymic branchial cysts, mediastinal cysts, pyothorax; Thoracotomy, sternotomy, lobectomy, chest trauma, pulmonary neoplasia-abscess, lobar torsion, pectus excavatum, thoracic neoplasia; Spinal cord diseases and surgery; Peripheral nerve diseases and surgery.

Veterinary Dentistry and Surgery (course type: obligatory; course code: NEUVET 507)

Course Objective: To teach the definition of dental diseases, diagnostic and examination methods, treatment and operation technique in small animals.

Course content: General dental structure, dental formula and anatomy, tooth type and shapes in small animals; Tooth development (Odontogenesis); Veterinary dental equipment; Clinical examination; Prophylaxis and oral hygiene; Dental radiography; Periodontics; Endodontics; Restoration; Exodontics; Orthodontics; Oral surgery; Jaw fracture repair, maxillectomy-mandibulectomy; Pain management.

Obstetrics and Gynaecology II (course type: obligatory; course code: NEUVET 509)

Course Objective: Intend to raise a veterinarian who is able to do any interventions about obstetrics, gynaecology, and reproduction.

Course content: Specific infections may be resulted in abortion in farm animals; Specific infections may be resulted in abortion in horse, dog and cat; Problems of puerperal period; Retentio secundinarum, acute septic metritis, subacute puerperal metritis; Hypocalcaemia in cows, pregnancy toxemia in small ruminants, lactation tetany in mares, eclampsia in dogs; Infertility in cows; Infertility due to abnormalities of genital organs; Infertility in cows; The methods of synchronization or stimulation of oestrus, methods of oestrus detection etc.; Infertility due to malnutrition in cows, anovulatory anoestrus, cystic ovaries suboestrus; Infertility in cows; the relationship between infertility and viral-bacterial infections, nonspecific infections metritis; Functional infertility in mares; Infectious infertility in mares, endometritis; Infertility in small ruminants; Infertility in dogs and cats; Gynaecologic operations.

Reproduction, Artificial Insemination and Andrology II (course type: obligatory; course code: NEUVET 511)

Course Objective: Andrology, reproduction and artificial insemination specific information about the students to gain both theoretical and practical.

Course content: Reproductive endocrinology, hypothalamus, pituitary, hormones secreted by the gonads and other tissues, reproductive endocrinology in female (puberty, estrous cycle, ovulation, pregnancy), reproductive endocrinology in male; Physiology of reproduction,

gametogenesis, transport and survival of gametes, capacitation and the acrosome reaction of spermatozoa, fertilization; Genital organs structure and examination; The collection of semen in male animals; Chemical composition and metabolism of semen; Detailed structure of spermatozoa; Factors affecting semen quality; Semen dilution, storing and thawing; Infertility in male animals; Ovulation induction and synchronization; Fundamental principles of embryo transfer; Reproduction and artificial insemination in poultry.

Eye Diseases II (course type: obligatory; course code: NEUVET 513)

Course Objective: Students in small animals, including large animals and exotic animal medicine clinic is an important part EYE Diseases that diagnosis, differential diagnosis, and treatment is aimed to teach their relationship with systemic diseases. Theoretical knowledge acquired at the end of the course (by supporting practical clinical applications), it is intended both to provide the ability to use the period of training in advanced vocational period.

Course content: Eye anatomy and examination methods; Inspection methods and refraction anomalies; Eyelid disorders, anomalies and diseases; Lacrimal system and diseases; Conjunctival diseases; Corneal diseases; Diseases for cornea; Tract uvealis and diseases; Lens diseases; Retinal diseases; Glaucoma; Orbital diseases; Neuroophthalmology.

Internal Diseases of Small Animals II (course type: obligatory; course code: NEUVET 515)

Course Objective: To give advanced information on the physiology, physiopathology, diagnosis and treatment of cardiologic, endocrinologic, dermatologic, immune-mediated, neurologic and oncologic diseases in small animals. Discussing about the developments and changes based on the actual literatures. Keeping student's participation level high to the course with presentations given by students.

Course content: Septic shock (Endotoxemia) and disseminated intravascular coagulation (DIC); EKG (Morphologic cardiologic diseases, influence of systemic diseases on EKG), hypertension; General approaches to echocardiographic examination: standard imaging techniques, clinical approach to the cardiac; Systolic and diastolic insufficiencies and their diagnosis and treatment, pulmonary oedema, thromboembolism, congenital heart defects; Feline hypertrophic cardiomyopathy, pericardial and pleural effusion, ascites; Pituitary gland and hypothalamus diseases, adrenal gland diseases; pancreatic endocrinal diseases, hypothyroidism, hyper - hypoadrenocorticism, diabetes mellitus, hypoglycaemia; Interactive presentations of dermatology; Muscle diseases; Primary epilepsy, canine granulomatous meningoencephalitis, feline ischemic encephalopathy, feline spongiform encephalopathy; Diagnostic approach into dermatological diseases, pruritis in dogs and cats, alopecia in dogs and cats; Lymphoma, systemic mast cell diseases, bone marrow diseases, renal disease anaemia, blood transfusion treatment; Special treatments for dermatologic diseases: antibacterial treatment, hyposensitization, immunomodulation, antihistaminic; Diagnosis and treatment of immune-mediated diseases.

Large Animal Internal Medicine II (course type: obligatory; course code: NEUVET 517)

Course Objective: In this lecture it is aimed to teach about the disorders of dermatologic, nervous and metabolism systems of sheep, goats, cattle, swine and horses also gastrointestinal, respiratory, cardiovascular, nervous and endocrinal diseases of horses. In addition, it is aimed to acquire knowledge about diseases of different systems of these animal species and ability to make differential diagnosis according to laboratory findings. Teaching appropriate and effective treatment, prophylaxis methods and preventive medication.

Course content: Metabolic diseases; Transport tetani; Atlanta paralytic to myoglobinuria, hypocalcemia with tetany; Mineral and vitamin deficiency diseases in farm animals and metabolism; Skin disorders: alopecia, pityriasis, parakeratosis, hyperkeratosis, urticaria, angioneurotic oedema; Urinary system disorders; Nervous system disorders; Sheep rabies, pseudo rabies, Louping ill, scrapie, equine viral arteritis-encephalitis in goats Maedi-Visna, pulmonary adenomatosis; Myeloma degenerative encephalopathy Equine protozoal myeloencephalitis, polineuritis equi, tetanus, botulism; Bacterial and rickettsial diseases of sheep; Viral and bacterial zoonotic diseases of animals; Some significant poisonings; Internal and external parasitic invasions.

Radiology (course type: obligatory; course code: NEUVET 521)

Course Objective: This lecture provides students with basic knowledge and understanding about radiography, in order to prepare them for clinical practice. It is aimed to get students acquainted with basic radiography techniques and evaluation of x-ray films for diagnosis of diseases.

Course content: Introduction, radiation physics, electromagnetic waves, reaction of radiation with matter, structure and function of an x-ray machine; Brightness and contrast of the film, equipment in the radiology department, digital radiography; Dark room, film developing techniques, identification, standard positioning, film evaluation principles, film faults and artefacts; Radiation protection; Standard and special radiographic positioning in small animals (based on species, region and disorder); Standard and special radiographic positioning in birds, reptiles and amphibians (based on species, region and disorder); Evaluation of radiographs: thorax, normal findings, pathologic findings; Evaluation of radiographs: abdomen, normal findings, pathologic findings.

Traumatology and Orthopaedic Surgery (course type: obligatory; course code: NEUVET 523)

Course Objective: To teach significant subjects of Orthopaedics and Traumatology, to describe diseases, to inform about clinical findings, diagnosis, differential diagnosis, prognosis and treatment of these diseases at practitioner's level and to transform the knowledge into the skill.

Course content: The description and content of Orthopaedics and Traumatology; Orthopaedic diseases of the bone tissue; Trauma; Examination of trauma patient, orthopaedic examination; Fracture definition, aetiology and classification of fractures; Clinical appearances, diagnosis and prognosis of fractures, fracture healing; Fracture treatment conservative management, operative management (applied by pins), operative management (applied by plate and screws); Fracture treatment in forelimb and hind limb fractures; Fracture and fracture treatment in young (immature) animals; Callus complications in fractures; Luxation; Open fractures-osteomyelitis; Cross lesions in dogs; Hip dysplasia in dogs; Osteochondrosis dissecans; Excision arthroplasty; Arthrodesis; Cats onychectomy; Dogs in the front and rear leg amputation.

Veterinary Anesthesiology and Reanimation (course type: obligatory; course code: NEUVET 523)

Course Objective: Students in small animals, large animals and exotic animal medicine in addition to acquiring basic anaesthesiology knowledge to be applied in the private system diseases other than elective surgery teach the anesthetic agents and techniques, veterinary emergency and provide resuscitation training course at the end of the theoretical knowledge of the light, by supporting students in clinical practice, and this training is intended to gain further professional skills in both periods.

Course content: Veterinary anaesthesiology history, theory and definition of anaesthesia; Anaesthesia will form the basis of the physiology of the nervous system, respiratory physiology that will form the basis of anaesthesia; Mechanisms of action of anaesthetic agents, anaesthetic agents to search for properties; Balanced anaesthesia (premedication in general anaesthesia induction and maintenance); Premedication, and apply those techniques premedicated; Solid anaesthetics and applied techniques; Volatile - gas anaesthetics and applied techniques; Dissociative anaesthesia, anaesthesia neurolept; The phases of general anaesthesia; Inhalation anaesthesia application methods; Intubation and general anaesthesia principles; Muscle relaxants; Anaesthesia protocols; Local anaesthesia, indications and application techniques; Reanimation.

Internal Diseases of Exotic Animals (course type: elective; course code: NEUVET 525)

Course Objective: The aim of this course is specifically designed to acquaint the student with the most common exotic pets, their husbandry, restraint, sampling, examination and treatment techniques.

Course content: Definition of exotic pet, handling, sample collection techniques, clinical and laboratory techniques; Parrot and budgerigars: digestive tract diseases; Clinical approach to dyspnoeic birds; Exotic birds skin diseases feather picking, pruritus, feather defects, beak and nail problems; Pigeons; Raptors; Lizards and snakes; Frequently seen dermatologic problems in reptiles; Rabbit, chinchilla, hamster and gerbils; Dermatophytosis, malocclusion, hairballs, hypovitaminosis E, ketosis, hypovitaminosis C and heat stress.

Behavioural Disorders of Small Animals (course type: elective; course code: NEUVET 527)

Course Objective: Nowadays, to accomplish the needs of increasing cat and dog population and to regulate relationship between societies, detecting animal behavioural problems to be known should be detected, treat with drugs and behavioural modification, before the occurrence of behavioural problems and aim to teach behavioural problems might occur in shelters or behaviour problems which inhibit adaptation and their solution.

Course content: History of canine and feline development, introduction to evaluating behaviour problems; Canine and feline behaviour of sensory and neuronal origin; Canine and feline vocal, postural, marking communications and communicative behaviour problems; Socialization and other critical periods, social behaviour problem; Aggression, types, diagnosis and treatment; Anxiety and compulsive behaviours; Adult urination and defecation, eliminative behaviour development, adult movements, resting behaviour, locomotor behaviour problems; Aggression, diagnosis and treatment options in cats; Elimination problems, anxiety in cats; Canine cognitive dysfunction, diagnosis and treatment; Psychopharmacology and alternative treatment options (homeotherapy, behavior modification techniques); Behaviour problems in shelters.

Clinical Interpretation of Laboratory Data (course type: elective; course code: NEUVET 529)

Course Objective: Student will be able to; select appropriate test types for specific investigations and to interpret their results; identify common causes for abnormal laboratory values; list circumstances that may produce false-negative or false-positive laboratory results; interpret the clinical significance of abnormal laboratory values and utilize clinical laboratory data to monitor various disease states.

Course content: An introduction to requesting laboratory tests and interpreting the results; Haematology information on all aspects of haematology and is organized into sections based on cell types in blood; Homeostasis information on the physiology of homeostasis, clinical signs, diagnostic testing; Chemistry information on all aspects of biochemical tests and is organized into sections based on parameters and panels; Urine analysis; Diagnostic testing in endocrine disorders test selection, utilization, and interpretation of endocrine-related tests / dynamic function tests; Inhouse cytology, sampling and interpretation the abnormalities; Inhouse serology choosing the right test and interpreting the results. False positives and false negatives; Exotics clinical laboratory testing of exotic animal species (birds, reptiles, amphibians, small mammals).

Teat Health Control Programs in Dairy Animals (course type: elective; course code: NEUVET 531)

Course Objective: To contribute anatomo-physiological and clinical knowledge of udder health and to present methods of control of the clinical mastitis.

Course content: Importance of the udder health; Udder anatomy and physiology; Udder forms and udder examination; Diseases of udder and udder skin caused by bacterial, fungal and viral agents; General aspects of mastitis; Clinical mastitis diagnosis and treatments; Trauma and injuries of udders, disorders of milk ejection and operation of teat canal and udder.

SAMPLE COPY

of

DIPLOMA SUPPLEMENT

Diploma No:	Diploma Date:
1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION	
1.1. Family name(s): 1.2. Given name(s):	1.3. Place and date of birth: 1.4. Student identification number:
2. INFORMATION IDENTIFYING THE QUALIFICATION	
2.1. Name of the qualification and (if applicable) the title conferred DOCTOR of VETERINARY MEDICINE, D.V.M. 2.2. Main field(s) of study for qualification VETERINARY MEDICINE 2.3. Name and status of awarding institution NEAR EAST UNIVERSITY, PRIVATE UNIVERSITY	2.4. Name and type of institution administering studies SAME AS 2.3. 2.5. Language(s) of instruction/examinations ENGLISH
3. INFORMATION ON THE LEVEL OF THE QUALIFICATION	
3.1. Level of qualification Second Cycle (Master's Degree)	3.2. Official length of program Normally 5 Years (excluding 1 year English Preparatory School, if necessary), 2 semesters per year, 16 weeks per semester
3.3. Access requirement(s) Admission of Turkish nationalities to higher education is based on a nation-wide Student Selection Examination (ÖSS) administered by the Higher Education Council of Turkey (YÖK). Admission of Turkish Republic of Northern Cyprus nationals is based on the Near East University Entrance and Placement Exam for Turkish Cypriots. Admission of foreign students is based on their high school credentials. Proof of English language proficiency is also required.	
4. INFORMATION ON THE CONTENTS AND RESULTS GAINED	
4.1. Mode of study Full-Time	4.2. Programme requirements A student is required to have a minimum CGPA of 2.00/4.00 and no failing grades (below DD).
4.3. Objectives The Faculty offers a contemporary and comprehensive training program which enables students to gain fundamental principles of lifelong learning and basics of professional development, as well as leading students to develop analytical thinking and criticism abilities in various fields related to Veterinary Medicine. The program of the Faculty is fundamentally focusing on giving a comprehensive training on Veterinary Medicine at undergraduate level. It also carries out research to made advancements in Veterinary Medicine, and contributing to production of healthy and prolific animal products to support the economy of country. The program focuses on both theoretical and practical training on Veterinary Medicine under the disciplines of Basic, Pre-Clinical and Clinical Sciences, Animal Breeding, Management and Nutrition, and Food Hygiene and Technology.	4.4. Programme details and the individual grades/marks obtained Please see the next page.
4.5. Grading scheme, grade translation and grade distribution guidance: For each course taken, the student is assigned one of the following grades by the course teacher. For A.Sc., B.Sc. or B.A. degrees, students must obtain at least DD or S from each course and have a GGPA of not less than 2.00 out of	

4.00 and have completed all the courses and summer practices in the program. For graduate degrees, students must obtain at least CC or S from each course for M.Sc. and M.A., at least BB for Ph.D. They also need to have a GCPA of 3.00 to graduate. The student's standing is calculated in the form of a Graduate Point Average (GPA) and Cumulative Grade Point (CGPA) and is announced at the end of each semester by the Registrar's Office. The total credit points for a course are obtained by multiplying the coefficient of the final grade by the credit hours. In order to obtain the GPA for any given semester, the total credit points are divided by the total credit hours. The averages are given up to two decimal points. Students who obtain a CGPA of 3.00-3.49 at the end of a semester are considered as "Honour Students" and those who obtain a CGPA of 3.50-4.00 at the end of a semester are considered as "High Honour Students" and this is recorded in their academic report. The letter grades, the quality point equivalents are:

Percentage	Course Coefficient	Grade	Percentage	Course Coefficient	Grade
90-100	4	AA	60-69	2	CC
85-89	3.5	BA	55-59	1.5	DC
80-84	3	BB	50-54	1	DD
70-79	2.5	CB	40-49	0.5	FD
39 and below	0	FF			

I- Incomplete S- Satisfactory Completion, U- Unsatisfactory, NA- Never Attended, E- Exempted, W- Withdrawn

4.6 Overall classification of the award CGPA:/.....

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study

May apply to third cycle (doctorate) programmes.

5.2. Professional status conferred

This degree enables the graduates to perform Veterinary Medicine Profession both in public and private sector.

6. ADDITIONAL INFORMATION

6.1. Additional information

The study program of the Faculty is acknowledged by the Higher Education Council (YÖK) of Turkey.

6.2. Sources for further information

Faculty web site <http://www.neu.edu.tr/en/node/6207>

Department web site <http://english.neu.edu.tr/>

University web site <http://www.neu.edu.tr>

The Council of Higher Education of Turkey

<http://www.yok.gov.tr>

Higher Education Planning, Evaluation Accreditation and Coordination of

North Cyprus Council Web site <http://www.ncyodak.org>

Edexcel Quality Assured Services

<http://www.edexcel.com/international/qualifications/edexcel-assured/Pages/default.aspx>

4.4. Program details and the individual grade/marks obtained:

1 (1 st Semester)						2 (2 nd Semester)					
Course Code	Course Name	CR	ECTS	Status	Grade	Course Code	Course Name	CR	ECTS	Status	Grade
NEUVET101	Anatomy I	5	7	Compulsory		NEUVET102	Anatomy II	4	6	Compulsory	
NEUVET103	Organic Chemistry	2	4	Compulsory		NEUVET104	Embriology I	1	2	Compulsory	
NEUVET105	Medical Biology	2	4	Compulsory		NEUVET106	Histology I	3	4	Compulsory	
NEUVET107	History Of Veterinary Medicine	1	2	Compulsory		NEUVET108	Medical Botany	1	3	Compulsory	
TUR 101	Turkish Language	2	2	Compulsory		NEUVET110	Medical Physics	2	4	Compulsory	
COM 101	Introduction to Computer Science	2	2	Compulsory		TUR 102	Turkish Language	2	2	Compulsory	
ENG 101	Foreign Language	4	5	Compulsory		ENG 102	Foreign Language	4	5	Compulsory	
AIT 101	Ataturk's Principles and Revolution History	2	2	Compulsory		AIT 102	Ataturk's Principles and Revolution History	2	2	Compulsory	
NEUVET 141	Preparation Techniques of Anatomic Specimens	1	2	Elective		NEUVET 142	Dissection and Exentration in Domestic Mammals	2	2	Elective	
		21	30					21	30		
3 (3 rd Semester)						4 (4 th Semester)					
Course Code	Course Name	CR	ECTS	Status	Grade	Course Code	Course Name	CR	ECTS	Status	Grade
NEUVET201	Anatomy III	4	6	Compulsory		NEUVET202	Biochemistry II	3	5	Compulsory	
NEUVET203	Biochemistry I	3	4	Compulsory		NEUVET204	Physiology II	4	6	Compulsory	
NEUVET205	Embriology II	1	2	Compulsory		NEUVET206	Animal Behaviour	1	2	Compulsory	
NEUVET207	Physiology I	3	4	Compulsory		NEUVET208	Immunology	3	5	Compulsory	
NEUVET209	Genetics	1	2	Compulsory		NEUVET210	Microbiology II	3	5	Compulsory	
NEUVET211	Histology II	3	4	Compulsory		NEUVET212	Virology II	3	5	Elective	
NEUVET213	Microbiology I	2	3	Compulsory		NEUVET242	Poultry Physiology	1	2	Elective	
NEUVET215	Virology I	2	3	Compulsory		NEUVET248	Viral Vaccines	1	2	Elective	
NEUVET241	Exercise Physiology	1	2	Elective							
NEUVET243	Population Genetics and Evolution Biology	1	2	Elective							
NEUVET245	Veterinary Surgeon and Society Relations	1	2	Elective							

NEUVET 247	Basic Biochemical Techniques in Biotechnology and their Fields of Use	1	2	Elective							
		23	36					19	32		

5 (5th Semester)

6 (6th Semester)

Course Code	Course Name	CR	ECTS	Status	Grade	Course Code	Course Name	CR	ECTS	Status	Grade
NEUVET301	Entomology	2	3	Compulsory		NEUVET302	Epidemiology	1	2	Compulsory	
NEUVET303	Parasitology	1	2	Compulsory		NEUVET304	Helminthology	3	3	Compulsory	
NEUVET305	Pharmacology I	3	4	Compulsory		NEUVET306	Pharmacology II	2	2	Compulsory	
NEUVET307	Animal Welfare	1	2	Compulsory		NEUVET310	Food Hygiene and Control	2	2	Compulsory	
NEUVET309	Pathology I	3	4	Compulsory		NEUVET312	Animal Nutrition and Nutritional diseases	3	3	Compulsory	
NEUVET311	Feed Hygiene and Technology	3	4	Compulsory		NEUVET314	Animal Improvement	1	1	Compulsory	
NEUVET313	Animal Breeding I	2	4	Compulsory		NEUVET316	Pathology II	3	3	Compulsory	
NEUVET315	Agronomy	1	2	Compulsory		NEUVET318	Protozoology	3	3	Compulsory	
NEUVET317	Topographic Anatomy	1	3	Compulsory		NEUVET320	Animal Breeding II	3	3	Compulsory	
NEUVET341	Metabolic Relations between Tissues and Organs	1	2	Elective		NEUVET322	Biostatistics	2	2	Compulsory	
NEUVET345	Mycology	1	2	Elective		NEUVET324	Introduction to Clinical	2	2	Compulsory	
		19	32					25	26		

(7th Semester)

8 (8th Semester)

Course Code	Course Name	CR	ECTS	Status	Grade	Course Code	Course Name	CR	ECTS	Status	Grade
NEUVET403	Bee Diseases	1	2	Compulsory		NEUVET402	Anaesthesiology-Reanimation	1	2	Compulsory	
NEUVET405	Meat Hygiene, Examination and Technology	2	3	Compulsory		NEUVET406	Surgery	4	4	Compulsory	
NEUVET407	Animal Health Economics and Management	2	1	Compulsory		NEUVET408	Obstetrics and Gynaecology	4	4	Compulsory	
NEUVET409	Poultry Diseases	3	4	Compulsory		NEUVET412	Small Animal Internal Medicine	4	4	Compulsory	
NEUVET411	Necropsy	2	2	Compulsory		NEUVET414	Clinics	8	8	Compulsory	
NEUVET413	Pathology III	3	4	Compulsory		NEUVET420	Large Animal Internal Medicine	2	4	Compulsory	
NEUVET415	Marine Products and Diseases	3	4	Compulsory		NEUVET900	Mandatory Summer Internships	0	0	Compulsory	
NEUVET417	Milk Hygiene and Technology	2	3	Compulsory							
NEUVET419	Public Health in Veterinary Medicine	1	2	Compulsory							
NEUVET421	Veterinary Medicine Legislation and Ethics	1	1	Compulsory							
NEUVET423	Toxicology and Environmental Protection	2	2	Compulsory							
NEUVET459	Principles of research and Publication Ethics	1	2	Elective							
NEUVET461	Cat and Dog Breeding	1	2	Elective							
		24	32					23	26		

9 (9th Semester)

10 (10th Semester)

Course Code	Course Name	CR	ECTS	Status	Grade	Course Code	Course Name	CR	ECTS	Status	Grade
NEUVET 503	Foot Diseases and Horseshoe Technique	1	1	Compulsory		NEUVET 502	Intern Training	24	26	Compulsory	
NEUVET 507	Dental Diseases Surgery	1	1	Compulsory		NEUVET 504	Clinical Term Paper	4	4	Compulsory	
NEUVET 509	Obstetrics and Gynaecology II	3	3	Compulsory							
NEUVET 511	Artificial Insemination and Andrology	2	2	Compulsory							
NEUVET 515	Small Animal Internal Medicine II	2	2	Compulsory							

NEUVET 517	Large Animal Internal Medicine II	2	2	Compulsory									
NEUVET 519	Clinics II	8	8	Compulsory									
NEUVET 521	Radiological	1	1	Compulsory									
NEUVET 523	Traumatology and Orthopaedic Surgery	2	2	Compulsory									
NEUVET 525	Exotic Animal Internal Medicine	1	2	Elective									
NEUVET 527	Small Animal Behavioural Disorders	1	2	Elective									
NEUVET 529	Clinical Interpretation of Laboratory Data	1	2	Elective									
		25	28										
							28	30					

TOTALCREDITS 160 - ECTS 240

7. CERTIFICATION OF THE SUPPLEMENT

7.1. *Date* : 06.07.2015

7.2. *Name and Signature* : Ümit Serdaroğlu

7.3. *Capacity* : Registrar

7.4. *Official stamp or seal* :

8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

The basic structure of the North Cyprus Education System consists of four main stages as pre-school education, primary education, secondary education and higher education.

Pre-school education consists of non-compulsory programs whereas primary education is a compulsory 8 year program for all children beginning from the age of 6. The secondary education system includes "General High Schools" and "Vocational and Technical High Schools".

The Higher Education System in North Cyprus is regulated by the Higher Education Planning, Evaluation, Accreditation and Coordination Council (Yükseköğretim Planlama, Denetleme, Akreditasyon ve Koordinasyon Kurulu – YÖDAK). Established in 1988, the Council regulates the activities of higher education institutions with respect to research, governing, planning and organization. The higher education institutions are established within the framework of the Higher Education Law. All programs of higher education should be accredited by YÖDAK.

Higher education in North Cyprus comprises all post-secondary higher education programmes, consisting of short, first, second, and third cycle degrees in terms of terminology of the Bologna Process. The structure of North Cyprus higher education degrees is based on a two-tier system, except for dentistry, pharmacy, medicine and veterinary medicine programmes which have a one-tier system. The duration of these one-tier programmes is five years except for medicine which lasts six years. The qualifications in these one-tier programmes are equivalent to the first cycle (bachelor degree) plus secondary cycle (master degree) degree. Undergraduate level of study consists of short cycle (associate degree) - (önlisans derecesi) and first cycle (bachelor degree) - (lisans derecesi) degrees which are awarded after the successful completion of full-time two-year and four-year study programmes, respectively.

Graduate level of study consists of second cycle (master degree) – (yüksek lisans derecesi) and third cycle (doctorate) – (doktora derecesi) degree programmes. Second cycle is divided into two sub-types named as master without thesis and master with thesis. Master programmes without thesis consists of courses and semester project. The master programmes with a thesis consist of courses, a seminar, and a thesis. Third cycle (doctorate) degree programmes consist of completion of courses, passing a qualifying examination and a

doctoral thesis. Specializations in dentistry, accepted as equivalent to third cycle programmes are carried out within the faculties of dentistry. Specialization in medicine, accepted as equivalent to third cycle programmes are carried out within the faculties of medicine, and university hospitals and training hospitals operated by the Ministry of Health.

Universities consist of graduate schools (institutes) offering second cycle (master degree) and third cycle (doctorate) degree programmes, faculties offering first cycle (bachelor degree) programmes, four-year higher schools offering first cycle (bachelor degree) degree programmes with a vocational emphasis and two-year vocational schools offering short cycle (associate degree) degree programmes of strictly vocational nature.

Second cycle degree holders may apply to third cycle programmes if their performance at the first cycle degree level is exceptionally high and their national central Graduate Education Entrance Examination (ALES) score is also high and their application is approved. The doctoral degree is conferred subject to at least one publication in a cited and refereed journal.

GENERAL STRUCTURE OF THE NORTH CYPRUS EDUCATION SYSTEM

