



DEPARTMENT OF BIOCHEMISTRY (VETERINARY) DOCTORATE PROGRAMME

I. SEMESTER								
C. CODE	COURSE NAME	C/E	Theo.	Prac.	Tot.	Credit		
	Compulsory Course					National	ECTS	
VBD 101	Expertise Branch Course	C	8	0	8	0	9	
VBD 102	Thesis Preparation Study	C	0	1	1	0	1	
Elective Courses (Total 20 ECTS credit courses will be taken in the Elective Courses Pool)								
	Elective Course I	E					4	
	Elective Course II	E					4	
	Elective Course III	E					4	
	Elective Course IV	E					4	
	Elective Course V	E					4	
	Total						30	

II. SEMESTER								
C. CODE	COURSE NAME	C/E	Theo.	Prac.	Tot.	Credit		
	Compulsory Course					National	ECTS	
VBD 103	Expertise Branch Course	C	8	0	8	0	9	
VBD 104	Thesis Preparation Study	C	0	1	1	0	1	
Elective Courses (A total of 20 ECTS will be taken the from Elective Courses pool)								
	Elective Course I	E					4	
	Elective Course II	E					4	
	Elective Course III	E					4	
	Elective Course IV	E					4	
	Elective Course V	E					4	
	Total						30	

III. SEMESTER								
C. CODE	COURSE NAME	C/E	Theo.	Prac.	Tot.	Credit		
	Compulsory Course					National	ECTS	
VBD 105	Expertise Branch Course	C	8	0	8	0	9	
VBD 106	Thesis Preparation Study	C	0	1	1	0	1	
VBD 107	Seminar	C	0	2	2	2	4	
Elective Courses (Total 16 ECTS credit courses will be taken in the Elective Courses Pool)								
	Elective Course I	E					4	
	Elective Course II	E					4	
	Elective Course III	E					4	
	Elective Course IV	E					4	
	Total						30	

IV. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 108	Thesis Study	C	0	1	1	0	21
VBD 109	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

V. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 110	Thesis Study	C	0	1	1	0	21
VBD 111	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

VI. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 112	Thesis Study	C	0	1	1	0	21
VBD 113	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

VII. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 114	Thesis Study	C	0	1	1	0	21
VBD 115	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

VIII. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 116	Thesis Study	C	0	1	1	0	21
VBD 117	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

IX. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 118	Thesis Study	C	0	1	1	0	21
VBD 119	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

X. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 120	Thesis Study	C	0	1	1	0	21
VBD 121	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

XI. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 122	Thesis Study	C	0	1	1	0	21
VBD 123	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

XII. SEMESTER							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Compulsory Course					National	ECTS
VBD 124	Thesis Study	C	0	1	1	0	21
VBD 125	Expertise Branch Course	C	8	0	8	0	9
Total			8	1	9	0	30

ELECTIVE COURSES POOL							
C. CODE	COURSE NAME	C/E	Theo	Prac.	Tot.	Credit	
	Elective Courses					National	ECTS
VBD 126	Amino Acid Metabolism	E	3	0	3	3	4
VBD 127	Anorganic Metabolism	E	3	0	3	3	4
VBD 128	Antioxidative Metabolism	E	3	0	3	3	4
VBD 129	Chemistry of Immunology	E	3	0	3	3	4
VBD 130	Biochemistry of Nutrition	E	3	0	3	3	4
VBD 131	Scientific Research, Article Writing and Ethics	E	3	0	3	3	4
VBD 132	Biophysical Chemistry	E	3	0	3	3	4
VBD 133	Biostatistic	E	3	0	3	3	4
VBD 134	Biocatalisors	E	3	0	3	3	4
VBD 135	Methods and Equipments in Biochemical Laboratory	E	2	2	4	3	4
VBD 136	Preparation of Solutions In Biochemistry Laboratory	E	2	2	4	3	4
VBD 137	Control of Metabolic Pathway in Biochemistry	E	3	0	3	3	4
VBD 138	Biological Membranes and Transport Systems	E	3	0	3	3	4
VBD 139	Malignant Growth and Development	E	3	0	3	3	4
VBD 140	Spesific Biochemical Tests of Various Diseases	E	2	2	4	3	4
VBD 141	Laboratory Animal and Applications	E	2	2	4	3	4
VBD 142	DNA Structure, Replication and Transcription	E	3	0	3	3	4
VBD 143	Biochemistry of Extracellular Matrix and Bone	E	3	0	3	3	4
VBD 144	Enzymes, Coenzymes And Principles Of Detection	E	3	0	3	3	4
VBD 145	Regulation of Gene Expression and Terminology	E	2	2	4	3	4
VBD 146	General Laboratory Tecniques and Collecting Samples	E	2	2	4	3	4
VBD 147	General Organic Chemistry	E	3	0	3	3	4
VBD 148	Homones and Principles of Detections	E	3	0	3	3	4
VBD 149	Biochemistry of Cell	E	3	0	3	3	4
VBD 150	Analysis of Urine	E	2	2	4	3	4
VBD 151	Detection of Minerals in Blood	E	2	2	4	3	4
VBD 152	Measurements of Organic Elements in Blood	E	2	2	4	3	4
VBD 153	Carbohydrates and Their Metabolism	E	3	0	3	3	4
VBD 154	Metabolic Illnesses of Clinical Biochemistry	E	3	0	3	3	4
VBD 155	Clinic Enzymology	E	2	2	4	3	4
VBD 156	Lipoproteins and Clinical Importance	E	3	0	3	3	4
VBD 157	Nucleic Acids and Metabolism	E	3	0	3	3	4
VBD 158	Oxidative Stess and Antioxidants	E	3	0	3	3	4
VBD 159	Metabolic Relationship Among Different Organs	E	3	0	3	3	4
VBD 160	PCR, Electrophoresis and Its Applications	E	2	2	4	3	4
VBD 161	Proteins and Metabolism	E	3	0	3	3	4
VBD 162	RIA, EIA Techniques and Application Fields	E	2	2	4	3	4

VBD 163	Biochemistry of Ruminant Diseases	E	3	0	3	3	4
VBD 164	Digestive Chemistry	E	3	0	3	3	4
VBD 165	Respiration Chemistry	E	3	0	3	3	4
VBD 166	Tumor Growth and Tumor Markers	E	3	0	3	3	4
VBD 167	Vitamines and Principles of Detections	E	3	0	3	3	4
VBD 168	Body Fluids and Acid-Base Balance	E	3	0	3	3	4
VBD 169	Chemistry Of Biological Fluids And Tissues Liquids	E	3	0	3	3	4
VBD 170	Fatty Acids and Lipid Metabolism	E	3	0	3	3	4
VBD 171	Biosynthesis and Metabolism Of High Energy Phoshate Groups	E	3	0	3	3	4
VBD 172	Development And Learning	E	3	0	3	3	4
VBD 173	Instructional Planning and Evaluation	E	3	0	3	3	4
VBD 174	Investigation Methods	E	3	0	3	3	4