

## Department of Animal Sciences

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### Curriculum for the Degree of Ph.D. in 1) *Ruminant and Monogastric Nutrition* and 2) *Animal Breeding and Genetics*

COURSE CODE		COURSE TITLE	CREDITS
01	*	Carbohydrates & Lipids in Animal Nutrition	3
02	*	Proteins & Amino acids in Animal Nutrition	3
03	*	Bioenergetic in Nutrition	3
04	*	Techniques & Methods of Nutrition Researches	4
05	*	Digestive Physiology of Ruminants	2
06	*	Digestive Physiology of Nonruminants	2
07	*	Digestive Microbiology of Ruminants	2
08	*	Feed Processing	3
09	*	Minerals in Animal Nutrition	3
10	*	Vitamins in Animal Nutrition	3
11	*	Experimental Design in Animal Sciences	2
12	*	Special Problems in Animal Nutrition	2
13	*	Seminar I	1
14	*	Seminar II	1
15	**	Metabolic Disorders	2
16	**	Techniques & Methods in Meat Researches and Muscle Biology	3
17	**	Growth Physiology	2
18	**	Enzymology	2
19	**	Animal Immunology	3
20	**	Advanced Fish Nutrition	2
21	**	Laboratory Animals Nutrition	2
22	**	Animal Biotechnolgy	4
23	**	Rumen Physiology	3
24	**	Laboratory Biochemistry	3
25	**	Mycotoxicology	3
26	**	Toxicology of the Agricultural and Industrial Chemicals in the Environment	3
27	**	Toxicology	2

\*Required

\*\*Elective Courses