

# MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR

M.V.SC. SEMESTER-WISE COURSE DISTRIBUTION (Academic Year 2023 – 24 & onwards)

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# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Anatomy and Histology M.V.Sc. Semester-wise Course Programme

Sr. No	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester	– I	
1.	ANA 601	Comparative Osteology and Arthrology	1 + 2 = 3	Core
2.	ANA 602	Comparative Splanchnology	2 + 2 = 4	Core
3.	ANA 605	Clinical Anatomy	0 + 1 = 1	Optional
4.	ANA 606	General Histology and Ultrastructure	1 + 1 = 2	Core
		Total	4 + 5 = 9	
		Semester -	- II	
1.	ANA 603	Myology, Angiology, Neurology and Aesthesiology of Ox	2 + 2 = 4	Core
2.	ANA 604	Gross, Histological and Histochemical Techniques	1 + 3 = 4	Optional
3.	ANA 607	Systemic Histology and Ultrastructure	3 + 1 = 4	Optional
		Total	2 + 2 = 4	
		Semester –	· III	
1.	ANA 608	Developmental Anatomy	2 + 1 = 3	Core
2.	ANA 609	Wild Life and Forensic Anatomy	1 + 0 = 1	Optional
3.	ANA 610	Masters Seminar	1 + 0 = 1	Core
4.	ANA 611	Masters Research	0 + 10 = 10	Core
5.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
6.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
7.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
8.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
9.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	6 + 13 = 19	
	T	Semester –		
1.	ANA 611	Master's Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

## Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Biochemistry M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	BCT 601	Biophysical Chemistry	2 + 0 = 2	Core
2.	BCT 602	Biochemistry of Biomolecules	2 + 0 = 2	Core
3.	BCT 603	Enzymology	2 + 1 = 3	Optional
4.	BCT 604	Analytical Techniques and Instrumentation in Biochemistry	1 + 1 = 2	Core
5.	BCT 606	Intermediary Metabolism and Regulation	3 + 0 = 3	Core
6.	BCT 609	Endocrinology and Reproductive Biochemistry	2 + 0 = 2	Optional
7.	BCT 611	Introduction to Bioinformatics and Computational Biology	1 + 1 = 2	Optional
		Total	8 + 1 = 9	
		Semester – II		
1.	BCT 605	Clinical Biochemistry of Animals	2 + 1 = 3	Optional
2.	BCT 607	Molecular Biochemistry	2 + 1 = 3	Core
3.	BCT 608	Nutritional And Industrial Biochemistry	2 + 0 = 2	Optional
4.	BCT 610	Biochemistry of Ruminants And Wild Animals	1 + 1 = 2	Optional
		Total	2 + 1 = 3	
		Semester – III		
1.	BCT 612	Masters Seminar	1 + 0 = 1	Core
2.	BCT 613	Masters Research	0 + 10 = 10	Core
3.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
4.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
5.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
б.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
7.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
	•	Semester – IV	•	
1.	BCT 613	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Physiology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
	•	Semester ·	- I	
1.	VPY 601	Physiology of Digestion	2 + 1 = 3	Core
2.	VPY 602	Cardiovascular and Respiratory Physiology	2 + 1 = 3	Core
3.	VPY 604	Hematology	2 + 1 = 3	Core
4.	VPY 603	Renal Physiology and Body Fluid Dynamics	2 + 1 = 3	Optional
		Total	6 + 3 = 9	
		Semester -		
1.	VPY 605	Growth and Environmental Physiology	2 + 0 = 2	Core
2.	VPY 606	Physiology of Animal Reproduction	2 + 1 = 3	Core
3.	VPY 607	Clinical Physiology	1 + 1 = 2	Core
4.	VPY 608	Neuromuscular Physiology	2 + 0 = 2	Optional
		Total	5 + 2 = 7	
		Semester –	III	
1.	VPY 609	Endocrinology of Domestic Animals	2 + 0 = 2	Core
2.	VPY 610	Instrumentation and Research Techniques in Veterinary Physiology	0 + 2 = 2	Core
3.	VPY 612	Masters Seminar	1 + 0 = 1	Core
4.	VPY 613	Master Research	0 + 10 = 10	Core
5.	VPY 611	Physiology of Wild Life	1 + 0 = 1	Optional
6.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
7.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
8.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
9.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
10.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	6 + 14 = 20	
		Semester –	IV	
1.	VPY 613	Master Research	0 + 20 = 20	Core
		Total	0+ 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Pharmacology & Toxicology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
	•	Semester – I		
1.	VPT-601	Concepts of Pharmacology, Drug Design and Development	2 + 0 = 2	Core
2.	VPT-602	Autonomic and Autacoid Pharmacology	2 + 1 = 3	Core
3.	VPT-603	CNS Pharmacology	2 + 1 = 3	Optional
4.	VPT-604	Digestive and Respiratory Pharmacology	2 + 1 = 3	Optional
5.	VPT-607	Chemotherapy	2 + 1 = 3	Core
		Total	6 + 2 = 8	
		Semester – II		
1.	VPT-605	Cardiovascular and Urinary SystemPharmacology	2 + 0 = 2	Optional
2.	VPT-606	Endocrine and Reproductive Pharmacology	2 + 1 = 3	Optional
3.	VPT-608	Toxicology of Xenobiotics	2 + 1 = 3	Core
4.	VPT-609	Toxinology	2 + 1 = 3	Optional
5.	VPT-610	Pharmacological Techniques	0 + 2 = 2	Core
6.	VPT-611	Techniques in Toxicology	0 + 2 = 2	Core
7.	VPT-612	Ethnopharmacology	1 + 1 = 2	Optional
8.	VPT-613	Fundamentals of Pharmacokinetics	1 + 1 = 2	Core
		Total	3 + 6 = 9	
	•	Semester – III		
1.	VPT-691	Masters Seminar	1 + 0 = 1	Core
2.	VPT-699	Masters Research	0 + 10 = 10	Core
3.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
4.	PGS 602	AgriculturalResearch,ResearchEthicsandDevelopmentProgrammes	1 + 0 = 1	Core
5.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
6.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
7.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester – IV		
1.	VPT-699	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Parasitology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester –	I	
1.	VPA 501	Platyhelminths - I	1 + 1 = 2	Core
2.	VPA 502	Platyhelminths - II	1 + 1 = 2	Core
3.	VPA 503	Nematohelminths and Acanthocephala	2 + 1 = 3	Core
4.	VPA 506	Diagnostic Parasitology	0 + 2 = 2	Optional
		Total	4 + 3 = 7	•
	•	Semester –	II	
1.	VPA 504	Arthropod Parasites	2 + 1 = 3	Core
2.	VPA 505	Parasitic Protozoa	2 + 1 = 3	Core
3.	VPA 507	Clinical Parasitology	1 + 1 = 2	Optional
4.	VPA 508	Management of Parasitic diseases	1 + 1 = 2	Optional
5.	VPA 509	Immunoparasitology	2 + 1 = 3	Optional
6.	VPA 510	Parasitic Zoonoses	2 + 0 = 2	Optional
7.	VPA 511	Parasites of Wildlife	1 + 1 =2	Optional
		Total	4 + 2 = 6	
		Semester – I	II	
1.	VPA 591	Masters Seminar	1 + 0 = 1	Core
2.	VPA 599	Masters Research	0 + 10 = 10	Core
3.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
4.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
5.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
6.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
7.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester – I	IV	
1.	VPA 599	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Microbiology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester		
1.	VMC 501	General Bacteriology	2 + 1 = 3	Core
2.	VMC 503	General Virology	2 + 1 = 3	Core
3.	VMC 508	Techniques in Microbiology	0 + 2 = 2	Optional
4.	VMC 509	Techniques in Molecular Microbiology	1 + 2 = 3	Optional
		Total	4 + 2 = 6	
	•	Semester	– II	
1.	VMC 502	Systematic Veterinary Bacteriology	2 + 1 = 3	Optional
2.	VMC 504	Systematic Veterinary Virology	2 + 1 = 3	Optional
3.	VMC 505	Principles of Veterinary Immunology	2 + 1 = 3	Core
4.	VMC 506	Veterinary Mycology	1 + 1 = 2	Core
		Total	3 + 2= 5	
		Semester -		
1.	VMC 507	Vaccinology	2 + 0 = 2	Optional
2.	VMC 510	Molecular Immunology	1 + 1 = 2	Optional
3.	VMC 511	Mucosal Immunology	1 + 0 = 1	Optional
4.	VMC 512	Introduction to Microbial Bioinformatics	1 + 0 = 1	Optional
5.	VMC 591	Master's Seminar	1 + 0 = 1	Core
6.	VMC 599	Master's Research	0 + 10 = 10	Core
7.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
8.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
9.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
10.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
11.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester -		
1.	VMC 599	Master's Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

### Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Pathology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester		
1.	VPL 501	General Pathology	2 + 1 = 3	Core
2.	VPL 502	Techniques in Pathology	0+2=2	Core
3.	VPL 503	Animal Oncology	1+1=2	Core
4.	VPL 504	Clinical Pathology	1 + 1 = 2	Core
		Total	4 + 5 = 9	
		Semester		
1.	VPL 505	Necropsy Procedures and Interpretations	0 + 1 = 1	Core
2.	VPL 506	Necropsy Conference	0 + 1 = 1	Core
3.	VPL 507	Systemic Pathology	2 + 1 = 3	Core
4.	VPL 508	Pathology of Infectious Diseases of Domestic Animals	2 + 1 = 3	Core
		Total	4 + 4 = 8	
		Semester	– III	
1.	VPL 509	Toxicopathology	2 + 1 = 3	Optional
2.	VPL 510	Avian Pathology	2 + 1 = 3	Core
3.	VPL 511	Pathology of Wild/ Zoo and Aquatic Animal Diseases	2 + 1 = 3	Optional
4.	VPL 512	Pathology of Laboratory Animal Diseases	2 + 1 = 3	Optional
5.	VPL 591	Master's Seminar	1 + 0 = 1	Core
6.	VPL 599	Masters Research	0 + 10 = 10	Core
7.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
8.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
9.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
10.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
11.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	6 + 13 = 19	
		Semester		
1.	VPL 599	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

## Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Public Health M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
	•	Semester – I		
1.	VPE 501	Concepts in Veterinary Public Health and One Health	2 + 0 = 2	Core
2.	VPE 502	Zoonoses - I	2 + 1 = 3	Core
3.	VPE 503	Zoonoses - II	2 + 1 = 3	Core
4.	VPE 505	Hygiene and Safety of Foods of Animal and Aquatic Origin	2 + 1 = 3	Core
		Total	8 + 3 = 11	
		Semester – Il	[	
1.	VPE 504	Principles of Epidemiology	2 + 1 = 3	Core
2.	VPE 506	Food-borne Infections and Intoxications	2 + 1 = 3	Optional
3.	VPE 508	Environmental Hygiene and Safety	2 + 1 = 3	Optional
4.	VPE 509	Applied Epidemiology	2 + 1 = 3	Optional
		Total	2 + 1 = 3	
	1	Semester – II		
1.	VPE 507	Food Safety Standards, and Regulations	2 + 1 = 3	Optional
2.	VPE 510	Biosecurity, Bioterrorism and Disaster Management	2 + 0 = 2	Optional
3.	VPE 511	Laboratory Techniques in Veterinary Public Health	0 + 3 = 3	Core
4.	VPE 591	Masters Seminar	1 + 0 = 1	Core
5.	VPE 599	Masters Research	0 + 10 = 10	Core
6.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
7.	PGS 602	AgriculturalResearch,ResearchEthicsandDevelopmentProgrammes	1 + 0 = 1	Core
8.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
9.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
10.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 15 = 19	
	•	Semester – IV		
1.	VPE 599	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

#### Maharashtra Animal and Fishery Sciences University, Nagpur Department of Animal Nutrition M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester –	I	
1.	ANN 601	Nutritional Biochemistry	1 + 0 = 1	Core
2.	ANN 602	Energy and Protein Nutrition	2 + 0 = 2	Core
3.	ANN 603	Minerals and Vitamin Nutrition and Feed Additives	2 + 1 = 3	Core
4.	ANN 604	Feed and Fodder Technology	1 + 1 = 2	Core
5.	ANN 605	Ruminant Nutrition	2 + 1 = 3	Core
		Total	8 + 3 = 11	
		Semester – 1		
1.	ANN 606	Non-Ruminant Nutrition	2 + 1 = 3	Core
2.	ANN 607	Research Methodology in Animal Nutrition	0 + 2 = 2	Core
3.	ANN 608	Companion Animal Nutrition	1 + 0 = 1	Optional
4.	ANN 609	Nutrition of Laboratory, Wild and Zoo Animals	2 + 1 = 3	Optional
5.	ANN 610	Non-Conventional Feed Resources	1 + 1 = 2	Optional
6.	ANN 611	Introductory Clinical Nutrition	1 + 0 = 1	Optional
7.	ANN 612	Rumen Biotechnology	1 + 0 = 1	Optional
		Total	2 + 3 = 5	
		Semester – I	II	
1.	ANN 691	Masters Seminar	1 + 0 = 1	Core
2.	ANN 699	Masters Research	0 + 10 = 10	Core
3.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
4.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
5.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
6.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
7.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester – I	V	
1.	ANN 699	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

### Maharashtra Animal and Fishery Sciences University, Nagpur Department of Animal Genetics and Breeding M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	AGB 601	Animal Cytogenetics and Immunogenetics I	2 + 1 = 3	Core
2.	AGB 602	Molecular Genetics I	2 + 1 = 3	Core
3.	AGB 603	Population and Quantitative Genetics	2 + 1 = 3	Core
4.	AGB 604	Selection Method and Breeding System	2 + 1 = 3	Core
		Total	8 + 4 = 12	
-		Semester – II		
1.	AGB 605	Biometrical Genetics I	2 + 1 = 3	Core
2.	AGB 606	Conservation of Animal Genetics Resources	2 + 0 = 2	Optional
3.	AGB 607	Cattle and Buffalo Breeding	2 + 1 = 3	Optional
4.	AGB 608	Sheep and Goat Breeding	2 + 0 = 2	Optional
5.	AGB 609	Poultry Breeding	2 + 1 = 3	Optional
6.	AGB 610	Laboratory Animal and Rabbit Breeding	2 + 0 = 2	Optional
7.	AGB 611	Swine Breeding	1 + 0 = 1	Optional
8.	AGB 612	Pet Animal Breeding (Dogs and Cats)	1 + 0 = 1	Optional
9.	AGB 613	Wild Animal Genetics and Breeding	1 + 0 = 1	Optional
10.	AGB 614	Equine Breeding	1 + 0 = 1	Optional
11.	AGB 615	Camel Breeding	1 + 0 = 1	Optional
12.	AGB 616	Yak and Mithun Breeding	1 + 0 = 1	Optional
13.	AGB 617	Statistical Methods in Animal Breeding	2 + 1 = 3	Optional
		Total	2 + 1 = 3	
		Semester – III		
1.	AGB 691	Masters Seminar	1 + 0 = 1	Core
2. 3.	AGB 699 PGS 601	Masters ResearchTechnicalWritingCommunications Skills	0 + 10 = 10 1 + 0 = 1	Core Core
4.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
5.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
6.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
7.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
1.	AGB 699	<b>Semester – IV</b> Masters Research	0 + 20 = 20	Core
1.	AGD 099	Masters Research Total	0 + 20 = 20 0 + 20 = 20	Core

#### Maharashtra Animal and Fishery Sciences University, Nagpur Department of Livestock Production and Management M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	LPM 601	Cattle and Buffalo Production Management	2 + 1 = 3	Core
2.	LPM 602	Sheep and Goat Production Management	2 + 1 = 3	Core
3.	LPM 603	Swine Production Management	1 + 1 = 2	Core
		Total		
	ſ	Semester – II		I
1.	LPM 604	Climatology and Livestock Production	1 + 1 = 2	Core
2.	LPM 605	Behaviour and Welfare of Farm Animals	1 + 1 = 2	Core
3.	LPM 606	Equine Production Management	1 + 1 = 2	Core
4.	LPM 607	Companion Animal Production Management	1 + 1 = 2	Core
		Total		
	ſ	Semester – III		I
1.	LPM 691	Masters Seminar	1 + 0 = 1	Core
2.	LPM 699	Masters Research	0 + 10 = 10	Core
3.	LPM 608	Farm Hygiene and Waste Management	1 + 1 = 2	Optional
4.	LPM 609	Integrated Livestock Farming Systems	1 + 1 = 2	Optional
5.	LPM 610	Management and Conservation of Wild and Zoo Animals	1 + 1 = 2	Optional
6.	LPM 611	Laboratory Animal Production Management	1 + 1 = 2	Optional
7.	LPM 612	Livestock Business Management	1 + 1 = 2	Optional
8.	LPM 613	Livestock Farm Machinery Management	0 + 2 = 2	Optional
9.	LPM 614	Poultry Farm and Hatchery Management	1 + 1 = 2	Optional
10.	LPM 615	Regional Animal Production Management	1 + 1 = 2	Optional
11.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
12.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
13.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
14.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
15.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
	·	Semester – IV		·
1.	LPM 699	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

## Maharashtra Animal and Fishery Sciences University, Nagpur Department of Livestock Products Technology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	LPT 601	Abattoir Practices and Meat Plant Operations	2 + 1 = 3	Core
2.	LPT 602	Fresh Meat Technology	1 + 1 = 2	Core
3.	LPT 603	Processing and Preservation of Meat	2 + 1 = 3	Core
		Total	5 + 3 = 8	
		Semester – II		
1.	LPT 604	Processing of Milk and Milk Products	1 + 1 = 2	Core
2.	LPT 605	Packaging and Marketing of Livestock Products	1 + 1 = 2	Core
3.	LPT 606	Microbiology and Quality Control of Livestock Products	1 + 1 = 2	Core
		Total	3 + 3 = 6	
		Semester – II	[	
1.	LPT 607	Slaughterhouse By-products Technology	1 + 1 = 2	Core
2.	LPT 691	Masters Seminar	1 + 0 = 1	Core
3.	LPT 699	Masters Research	0 + 10 = 10	Core
4.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
5.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
б.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
7.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
8.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	5 + 13 = 18	
		Semester – IV		
1.	LPT 699	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Animal Reproduction, Gynaecology and Obstetrics M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester –	·I	
1.	VGO 501	General Gynaecology	2 + 1 = 3	Core
2.	VGO 502	Female Infertility in Farm Animals	2 + 1 = 3	Core
3.	VGO 507	Clinical Practice-I	0 + 3 = 3	Core
		Total	4 + 5 = 9	
	•	Semester –		
1.	VGO 503	Veterinary Obstetrics	2 + 1 = 3	Core
2.	VGO 504	Andrology and Male Infertility	2 + 1 = 3	Core
3.	VGO 508	Clinical Practice-II	0 + 3 = 3	Core
4.	VGO 590	Special Problem	0 + 1 = 1	Optional
5.	VGO 505	Semen Preservation and Artificial Insemination	2 + 1 = 3	Optional
		Total	4 + 5 = 9	
		Semester –		
1.	VGO 506	Basics of Reproductive Biotechnology	2 + 1 = 3	Core
2.	VGO 591	Masters Seminar	1 + 0 = 1	Core
3.	VGO 599	Masters Research	0 + 10 = 10	Core
4.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
5.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
6.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
7.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
8.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	6 + 13 = 19	
		Semester –		
1.	VGO 599	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Surgery and Radiology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course		
Semester – I						
1.	VSR 501	Clinical Practice - I	0 + 3 = 3	Core		
2.	VSR 503	Principles of Surgery	2 + 1 = 3	Core		
3.	VSR 504	Anaesthesia and Analgesia	2 + 1 = 3	Core		
		Total	4 + 5 = 9			
		Semester –	II			
1.	VSR 502	Clinical Practice - II	0 + 3 = 3	Core		
2.	VSR 505	Diagnostic Imaging Techniques	2 + 1 = 3	Core		
3.	VSR 510	Ophthalmology	1 + 1 = 2	Optional		
		Total	2 + 4 = 6			
		Semester –	III			
1.	VSR 507	Orthopaedic Surgery	2 + 1 = 3	Core		
2.	VSR 591	Masters Seminar	1 + 0 = 1	Core		
3.	VSR 599	Masters Research	0 + 10 = 10	Core		
4.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core		
5.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core		
6.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core		
7.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core		
8.	PGS 605	Library and Information Services	0 + 1 = 1	Core		
		Total	6 + 13 = 19			
Semester – IV						
1.	VSR 599	Masters Research	0 + 20 = 20	Core		
		Total	0 + 20 = 20			

## Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary Medicine M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
	•	Semester – I		
1.	VMD 501	Ruminant Medicine- Internal	3 + 0 = 3	Core
2.	VMD 511	Clinical Diagnostic Techniques	0 + 2 = 2	Core
3.	VMD 516	Clinical Practice-I	0 + 3 = 3	Core
4.	VMD 503	Equine Medicine	2 + 0 = 2	Optional
5.	VMD 508	Avian and Swine Medicine	2 + 0 = 2	Optional
6.	VMD 509	Zoo, Wild and Laboratory Animal Medicine	1 + 0 = 1	Optional
		Total	3 + 5 = 8	
	·	Semester – II		
1.	VMD 502	Ruminant Medicine- Infectious	3 + 0 = 3	Core
2.	VMD 504	Canine and Feline Medicine-I	2 + 0 = 2	Core
3.	VMD 517	Clinical Practice-II	0 + 3 = 3	Core
0.	VIIID 011	Metabolic and Endocrine	0.00	0010
4.	VMD 506	Diseases, Nutritional Deficiencies and Diseases of Mammary Gland	2 + 0 = 2	Optional
5.	VMD 510	Toxicology and Forensic Medicine	1 + 0 = 1	Optional
6.	VMD 512	Emergency Medicine	0 + 2 = 2	Optional
7.	VMD 514	Oncology and Ethno-veterinary Medicine	1 + 0 = 1	Optional
8.	VMD 515	Animal Disease Investigation and Biosecurity	1 + 1 = 2	Optional
		Total	5 + 3 = 8	
		Semester – III		
1.	VMD 505	Canine and Feline Medicine-II	2 + 0 = 2	Core
2.	VMD 513	Diagnosis of Veterinary Infectious Diseases	0 + 1 = 1	Core
3.	VMD 591	Masters Seminar	1 + 0 = 1	Core
4.	VMD599	Masters Research	0 + 10 = 10	Core
5.	VMD 507	Paediatrics and Geriatrics	$\frac{10^{-10}}{2+0} = 2$	Optional
6.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
7.	PGS 602	AgriculturalResearch,ResearchEthicsandDevelopmentProgrammes	1 + 0 = 1	Core
8.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
9.	PGS 604	Intellectual Property and its management in Agriculture	1 + 0 = 1	Core
10.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	6 + 13 = 19	
		Semester – IV		
1.	VMD 599	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary and Animal Husbandry Extension M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	EXT 601	Development perspectives of Extension Education	2 + 1 = 3	Core
2.	EXT 602	Communication for Livestock Development	1 + 1 = 2	Core
3.	EXT 603	Diffusion and Adoption of Innovations	2 + 1 = 3	Core
4.	EXT 604	Programme Planning and Evaluation	1 + 1 = 2	Core
5.	EXT 610	Farm Journalism	1 + 1 = 2	Optional
		Total	6 + 4 = 10	
		Semester – I	I	
1.	EXT 605	Research Methodology	2 + 1 = 3	Core
2.	EXT 606	Social Psychology and Group Dynamics	2 + 1 = 3	Core
3.	EXT 608	Human Resource Management in Animal Husbandry Sector	1 + 1 = 2	Core
4.	SSS 600	Statistics for Social Sciences	1 + 1 = 2	Core
5.	EXT 609	Gender Empowerment and Livestock Development	1 + 0 = 1	Optional
		Total	6 + 4 = 10	
		Semester – II	Ι	
1.	EXT 607	Livestock Entrepreneurship	1 + 2 = 3	Optional
2.	EXT 611	Masters Seminar	1 + 0 = 1	Core
3.	EXT 612	Masters Research	0 + 10 = 10	Core
4.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
5.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
6.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
7.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
8.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester – I	7	
1.	EXT 612	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

# Maharashtra Animal and Fishery Sciences University, Nagpur Department of Veterinary and Animal Husbandry Extension M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
		Semester – I		
1.	PSC 602	Poultry Nutrition and Feeding	2 + 1 = 3	Core
2.	PSC 603	Commercial Layer and Broiler Management	2 + 1 = 3	Core
3.	PSC 604	Breeder Stock and Hatchery Management	2 + 1 = 3	Core
4.	PSC 605	Poultry Health and Biosecurity	2 + 1 = 3	Optional
5.	PSC 606	Management of Other Avian Species	3 + 1 = 4	Optional
6.	PSC 609	Physiology of Poultry Production	1 + 1 = 2	Core
		Total	12 + 6 = 18	
	•	Semester – Il	[	
1.	PSC 601	Poultry Breeding and Genetics	2 + 1 = 3	Core
2.	PSC 607	Poultry Products Technology	2 + 1 = 3	Core
3.	PSC 608	Poultry Economics, Project Formulation and Marketing	2 + 1 = 3	Optional
4.	PSC 610	Commercial Poultry Nutrition	1 + 1 = 2	Optional
5.	PSC 611	Poultry Welfare and Waste Management	2 + 0 = 2	Optional
		Total	9 + 4 = 13	
	•	Semester – II	I	
1.	PSC 691	Masters Seminar	1 + 0 = 1	Core
	PSC 699	Masters Research	0 + 10 = 10	Core
2.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
3.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
4.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
5.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
6.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 12 = 16	
		Semester – IV	1	
1.	PSC 699	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	

## Maharashtra Animal and Fishery Sciences University, Nagpur Department of Animal Biotechnology M.V.Sc. Semester-wise Course Programme

Sr. No.	Course No.	Title of the Course	Credits	Core / Optional Course
	·	Semester – I		
1.	BTY 601	Basic and Applied Biotechnology	2 + 0 = 2	Core
2.	BTY 602	Fundamentals of Cell Biology	2 + 0 = 2	Core
3.	BTY 604	Animal Cell Culture–Principles and Applications	2 + 1 = 3	Optional
4.	BTY 606	Immunology Applied to Biotechnology	2 + 1 = 3	Optional
		Total	4 + 0 = 4	
	•	Semester – II		
1.	BTY 603	Molecular Biology and Genetic Engineering	2 + 0 = 2	Optional
2.	BTY 605	Molecular Diagnostics	2 + 1 = 3	Optional
3.	BTY 607	Introduction to Bioinformatics	2 + 1 = 3	Optional
4.	BTY 608	Animal Genomics	1 + 1 = 2	Core
5.	BTY 610	Reproductive Biotechnology	2 + 1 = 3	Core
		Total	3 + 2 = 5	
		Semester – III		
1.	BTY 609	Techniques in Molecular Biology and Genetic Engineering	0 + 2 = 2	Core
2.	BTY 611	Masters Seminar	1 + 0 = 1	Core
3.	BTY 612	Masters Research	0 + 10 = 10	Core
4.	PGS 601	Technical Writing and Communications Skills	1 + 0 = 1	Core
5.	PGS 602	Agricultural Research, Research Ethics and Rural Development Programmes	1 + 0 = 1	Core
6.	PGS-603	Basic concepts in laboratory techniques	0 + 1 = 1	Core
7.	PGS 604	Intellectual Property and its managementin Agriculture	1 + 0 = 1	Core
8.	PGS 605	Library and Information Services	0 + 1 = 1	Core
		Total	4 + 14 = 18	
		Semester – IV	· · · · · · · · · · · · · · · · · · ·	
1.	BTY 612	Masters Research	0 + 20 = 20	Core
		Total	0 + 20 = 20	