



List of Courses which focuses on Professional Ethics, Gender, Human Values, Environment & Sustainability and other value framework

Department : Zoology

Programme Name : M.Sc.

Academic Year :2021-22

Courses which focuses on Professional Ethics, Gender, Human Values, Environment & Sustainability and other value framework:

Sr. No.	Course Code	Name of the Course
01.	LZT-303 E	Occupational and Environmental Toxicity
02.	LZT-401	Evolution and Environmental Biology
03.	LZT-404 F	Prenatal Diagnosis and Pre-implantation Genetics
04.	ZOPBTA1	Research Methodology

V. K. Khanna

RESPONSIBLE
HEAD
गुरु गिरीश शर्मा
Department of Zoology
गुरु घासीदास वि.वि., बिलासपुर
Guru Ghasidas Vishwavidyalaya, Bilaspur



Scheme and Syllabus

DSE: A <i>Biochemistry and Molecular Biology</i>	LZT 303A	Biochemistry of Intermediary Metabolism	4	4	40	60	100
DSE: A <i>Biochemistry and Molecular Biology</i>	LZT 304A	Molecular Biology of Information Pathway: Nucleic Acids	4	4	40	60	100
DSE: B <i>Mammalian Reproductive Physiology and Endocrinology</i>	LZT 303B	Neuroendocrinology and Non-Classical Hormones	4	4	40	60	100
DSE: B <i>Mammalian Reproductive Physiology and Endocrinology</i>	LZT 304B	Male and Female Reproduction	4	4	40	60	100
DSE: C <i>Fish Biology</i>	LZT 303C	Fish Culture and Pathology	4	4	40	60	100
DSE: C <i>Fish Biology</i>	LZT 304C	Fish Anatomy and Physiology	4	4	40	60	100
DSE: D <i>Neuroscience</i>	LZT 303D	Brain and Neuron	4	4	40	60	100
DSE: D <i>Neuroscience</i>	LZT 304D	Developmental Neurobiology	4	4	40	60	100
DSE: E <i>Toxicology</i>	LZT 303E	Occupational and Environmental Toxicity	4	4	40	60	100
DSE: E <i>Toxicology</i>	LZT 304E	Mechanism of Toxicology	4	4	40	60	100
DSE: F <i>Epidemiology and Molecular Genetics</i>	LZT 303F	Basic Epidemiology	4	4	40	60	100
DSE: F <i>Epidemiology and Molecular Genetics</i>	LZT 304F	Clinical Epidemiology	4	4	40	60	100
Core Course Practical 5	LZL 305	Lab. Exercises based on courses LZT 301 and 302	6	3	40	60	100
DSE Practical (Elective)	LZL 306	Lab. Exercises based on courses LZT 303 and 304 (A-F)	6	3	40	60	100
				22	240	360	600
Semester IVth							
Core Course 11	LZT 401	Evolution and Environmental Biology	4	4	40	60	100
Core Course 12	LZT 402	Biostatistics OR Discrete Data Analysis: MOOC	4	4	40	60	100
DSE: A <i>Biochemistry and Molecular</i>	LZT 403A	Protein and Enzymology	4	4	40	60	100

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<i>Biology</i>								
DSE: A <i>Biochemistry and Molecular Biology</i>	LZT 404A	Medical Biochemistry	4	4	40	60	100	
DSE: B <i>Mammalian Reproductive Physiology and Endocrinology</i>	LZT 403B	Hormone Receptors and Signaling Mechanism	4	4	40	60	100	
DSE: B <i>Mammalian Reproductive Physiology and Endocrinology</i>	LZT 404B	Fertility and Sterility	4	4	40	60	100	
DSE: C <i>Fish Biology</i>	LZT 403C	Fish Reproduction, Genetics and Biotechnology	4	4	40	60	100	
DSE: C <i>Fish Biology</i>	LZT 404C	Capture Fishery	4	4	40	60	100	
DSE: D <i>Neuroscience</i>	LZT 403D	Cellular Neurophysiology and Neurochemistry	4	4	40	60	100	
DSE: D <i>Neuroscience</i>	LZT 404D	Sensory, Motor and Regulatory Systems	4	4	40	60	100	
DSE: E <i>Toxicology</i>	LZT 403E	Mechanism of Toxicity	4	4	40	60	100	
DSE: E <i>Toxicology</i>	LZT 403E	Systemic Toxicity	4	4	40	60	100	
DSE: F <i>Epidemiology and Molecular Genetics</i>	LZT 403F	Molecular Markers and Genome Analysis	4	4	40	60	100	
DSE: F <i>Epidemiology and Molecular Genetics</i>	LZT 404F	Prenatal Diagnosis and Pre-Implantation Genetics	4	4	40	60	100	
DES Dissertation	LZL 405	Project work / Dissertation	12	6	80	120	200	
				22	240	360	600	

1. Discipline Specific Electives (DSE) for each session will be offered to students on the basis of availability of faculty and infrastructure.
2. Offering of DSE in any particular session will be decided after a formal meeting of faculty members of Department of Zoology.
3. Each student may elect any one out of the given electives (A, B, C, D, E and F).
4. Elective papers will be distributed among the students on the basis of merit/choice. The project work/dissertation will be carried out only in the field of respective elective papers (A, B, C, D, E and F) opted by the students.


Prof. S K Prasad
(External Expert)


Dr. Rohit Seth
(Member)


Dr. S K Verma
(Member)


Prof. LVKS Bhaskar
(HOD)



**Semester-wise Theory Papers/ Practical
Masters of Science in Zoology (CBCS)
Department of Zoology, School of Life Science**

Course Opted	Course Code	Name of the Course	T-L-D /Week	Credits	CCA	ESE	Total
Semester - Ist							
CC 1	ZOPATT1	Comparative Anatomy of Vertebrates	T-3	3	30	70	100
CC 1	ZOPALT1	Comparative Anatomy of Vertebrates	L-4	2	15	35	50
CC 2	ZOPATT2	Cell Biology	T-3	3	30	70	100
CC 2	ZOPALT2	Cell Biology	L-4	2	15	35	50
CC 3	ZOPATT3	Endocrinology	T-3	3	30	70	100
CC 3	ZOPALT3	Endocrinology	L-4	2	15	35	50
OE 1	ZOPATO1	To be drawn from the pool of OE	T-3	3	30	70	100
OE 1	ZOPALO1	To be drawn from the pool of OE	L-4	2	15	35	50
	*Certificate	UACE, VAC, CC, OCC and others offered by university					
			28H/W	20	180	420	600
Semester IInd							
CC 4	ZOPBT11	Biochemistry and Molecular Biology	T-3	3	30	70	100
CC 4	ZOPBLT1	Biochemistry and Molecular Biology	L-4	2	15	35	50
CC 5	ZOPBT12	Basic Mammalian Physiology	T-3	3	30	70	100
CC 5	ZOPBLT2	Basic Mammalian Physiology	L-4	2	15	35	50
CC 6	ZOPBT13	Animal behavior	T-3	3	30	70	100
CC 6	ZOPBLT3	Animal behavior	L-4	2	15	35	50
DSE: 1	ZOPBTD1	Molecular Genetics	T-3	3	30	70	100
DSE: 1	ZOPBLD1	Molecular Genetics	L-4	2	15	35	50
RM	ZOPBTA1	Research Methodology	T-2	2	30	70	100
	*Certificate	UACE, VAC, CC, OCC and others offered by university					
			30H/W	22	210	490	700
Semester IIIrd							
CC 7	ZOPCTT1	Developmental Biology	T-3	3	30	70	100
CC 7	ZOPCLT1	Developmental Biology	L-4	2	15	35	50
CC 8	ZOPCTT2	Regulatory Mammalian Physiology	T-3	3	30	70	100
CC 8	ZOPCLT2	Regulatory Mammalian Physiology	L-4	2	15	35	50
CC 9	ZOPCTT3	Evolution, Environmental Biology and Sustainable Development	T-3	3	30	70	100
CC 9	ZOPCLT3	Evolution, Environmental Biology and Sustainable Development	L-4	2	15	35	50
DSE: 2	ZOPCID1	Brain function and Mental Awareness	T-3	3	30	70	100
DSE: 2	ZOPCLD1	Brain function and Mental Awareness	L-4	2	15	35	50
	*Certificate	UACE, VAC, CC, OCC and others offered by university					
			28H/W	20	180	420	600
Semester IVth							
CC 10	ZOPDIT1	Biotechniques	T-3	3	30	70	100

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