



Implementation of CBCS

Minutes of Meetings (MoM) of Board of Studies (BoS)

Academic Year : 2022-23

School : School of Life Sciences

Department : Zoology

Date and Time : 24-12-2021 - 12:00 noon

Venue : Meeting room

The scheduled meeting of member of Board of Studies (BoS) of Department of Zoology, School of Studies of Life Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur was held to design and discuss the contents of each paper of P.G (CBCS) by members (both internal and external).

The following members were present in the meeting:

1. Prof. SK Prasad (External Expert Member BoS, Dept. of Biosciences., Pandit Ravishankar Shukla University)
2. Prof. LVKS Bhaskar (HOD, Prof., Dept. of Zoology.-cum Chairman, BOS)
4. Dr. Rohit Seth (Member BoS, Associate Professor, Dept. of Zoology)
5. Dr. Sushant Kumar Verma (Member, Assistant Professor, Dept. of Zoology)

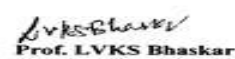
Following points were discussed during the meeting

- CBCS scheme will be implemented for PG courses for I to IV semester.
- As per CBCS-scheme, Department of Zoology will offer Discipline specific course (DSE) in fourth semester on the basis of availability of faculty.
- Each student will study one elective paper (A/B/C/D).
- The project dissertation will be carried out in the field of respective elective papers by fourth semester students.
- Open elective courses will be offered by department in first semester is fundamental of public health/ applied zoology


Prof. S K Prasad
(External Expert)


Dr. Rohit Seth
(Member)


Dr. S K Verma
(Member)


Prof. LVKS Bhaskar
(HOD)

निष्पन्न
HEAD
अनु विज्ञान विभाग
Department of Zoology
गुरु घासीदास वि.वि., बिलासपुर
Guru Ghasidas Vishwavidyalaya, Bilaspur



Scheme and Syllabus- PG

Scheme and Syllabus

For

M. Sc. Zoology (CBCS)

Applicable from Session 2021-2022 to onwards

Department of Zoology

School of Life Sciences

Guru Ghasidas Vishwavidyalaya, Bilaspur (CG)

Blam *S. K. Singh* *Devi*
S. K. Singh



Post Graduate Program: M. Sc. Zoology (CBCS)
Offered by the Department of Zoology, School of Life Sciences

1. Name of the Program : Master of Science in Zoology
2. Specializations available : Biochemistry and Molecular Biology,
Fish Biology,
Mammalian Reproductive Physiology and Endocrinology, and
Toxicology.
3. Program Specifications
School of studies: School of Life Sciences
Department: Department of Zoology
Program: M.Sc. in Zoology
Date of approval in Board of Studies: 21/09/2021
4. Mode of study: Full time (semester system)
Class room teaching; experiential learning; tutorials; project
assignments and dissertation work.

Purpose of the Program:

The Master of Science degree program in Zoology provides students the opportunity to enhance their knowledge and competence in the diverse field of animal science and encourages students to get indulged in the subject. Another focus of this program is to motivate students towards research. Students are encouraged to get involved in dissertation projects under the guidance of faculty mentors that address topics related to animal health, environment, nutrition, physiology, production, and behavior. The attainment of a master's degree also qualifies students to pursue further specialized training and gain entrance to professional schools, or to pursue a doctorate.

Learning outcomes:

- Students will be able to identify the major groups of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework.
- Students will be able to compare and contrast the characteristics of animals that differentiate them from other forms of life.
- Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.
- Students will be able to understand the concepts of physiology, nutrition, health and economics with reference to animals.
- Students will be able to explain the mechanisms and role of reproductive physiology, Immunology, toxicology & neurobiology in health & disease
- Students will be able to apply the scientific method to questions in biology by formulating testable hypotheses, gathering data that address these hypotheses, and analyzing those data and will be able to demonstrate critical thinking and problem solving skills in Biostatistics course.
- Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system.
- Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.

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Bhaskar SK Rawat
J.K. Meena



**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-4	4	40	60	100
CC 1	ZOPALT1	Comparative Anatomy of Vertebrates	L-2	1	20	30	50
CC 2	ZOPATT2	Cell Biology and Genetics	T-4	4	40	60	100
CC 2	ZOPALT2	Cell Biology and Genetics	L-2	1	20	30	50
CC 3	ZOPATT3	Biochemistry and Molecular Biology	T-4	4	40	60	100
CC 3	ZOPALT3	Biochemistry and Molecular Biology	L-2	1	20	30	50
CC 4	ZOPATT4	Basic Mammalian Physiology	T-4	4	40	60	100
CC 4	ZOPALT4	Basic Mammalian Physiology	L-2	1	20	30	50
			24H/W	20	240	360	600
Semester IInd							
CC 5	ZOPBTT1	Animal behaviour	T-4	4	40	60	100
CC 5	ZOPBLT1	Animal behaviour	L-2	1	20	30	50
CC 6	ZOPBTT2	Developmental Biology	T-4	4	40	60	100
CC 6	ZOPBLT2	Developmental Biology	L-2	1	20	30	50
CC 7	ZOPBTT3	Endocrinology	T-4	4	40	60	100
CC 7	ZOPBLT3	Endocrinology	L-2	1	20	30	50
CC 8	ZOPCTT4	Regulatory Mammalian Physiology	T-4	4	40	60	100
CC 8	ZOPCLT4	Regulatory Mammalian Physiology	L-2	1	20	30	50
			24H/W	20	240	360	600
Semester IIIrd							
OE1	ZOPCTO1	Fundamental of Public Health	T-4	4	40	60	100
OE1	ZOPCLO1	Fundamental of Public Health	L-2	1	20	30	50
OE 2	ZOPCTO2	Brain function and Mental Awareness	T-4	4	40	60	100
OE 2	ZOPCLO2	Brain function and Mental Awareness	L-2	1	20	30	50
DSE: 1	ZOPCTD1	Evolution, Environmental Biology and Sustainable Development	T-4	4	40	60	100
DSE: 1	ZOPCLD1	Evolution, Environmental Biology and Sustainable Development	L-2	1	20	30	50
DSE: 2	ZOPCTD2	Biotechniques	T-4	4	40	60	100
DSE: 2	ZOPCTD2	Biotechniques	L-2	1	20	30	50
			24H/W	20	240	360	600
Semester IVth							
RM	ZOPDTA1	Research Methodology	T-4	4	40	60	100
DSE: A	ZOPDTD1	Biochemistry of Intermediary Metabolism and Enzymology	T-4	4	40	60	100
DSE: A	ZOPDL1	Biochemistry of Intermediary Metabolism and Enzymology	L-2	1	20	30	50
DSE: A	ZOPDTD2	Molecular Biology of Information Pathway: Nucleic Acids	T-4	4	40	60	100
DSE: A	ZOPDL1	Molecular Biology of Information Pathway: Nucleic Acids	L-2	1	20	30	50

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DSE: B	ZOPDTD3	Neuroendocrinology, Non-Classical Hormones and Signaling	T-4	4	40	60	100
DSE: B	ZOPDL3	Neuroendocrinology, Non-Classical Hormones and Signaling	L-2	1	20	30	50
DSE: B	ZOPDTD4	Mammalian Reproduction, Fertility and Sterility	T-4	4	40	60	100
DSE: B	ZOPDL4	Mammalian Reproduction, Fertility and Sterility	L-2	1	20	30	50
DSE: C	ZOPDTD5	Fish Anatomy, Physiology and Biotechnology	T-4	4	40	60	100
DSE: C	ZOPDL5	Fish Anatomy, Physiology and Biotechnology	L-2	1	20	30	50
DSE: C	ZOPDTD6	Fish Culture, Capture Fishery and Fish Pathology	T-4	4	40	60	100
DSE: C	ZOPDL6	Fish Culture, Capture Fishery and Fish Pathology	L-2	1	20	30	50
DSE: D	ZOPDTD7	Mechanism of Toxicity	T-4	4	40	60	100
DSE: D	ZOPDL7	Mechanism of Toxicity	L-2	1	20	30	50
DSE: D	ZOPDTD8	Reactive Metabolites and Defense System in Biology	T-4	4	40	60	100
DSE: D	ZOPDL8	Reactive Metabolites and Defense System in Biology	L-2	1	20	30	50
Dissertation	ZOPDDD1	Based on DSE Elected (I/II/III/IV)	D-12	6	80	120	200
			28H/W	20	240	360	600

1. Discipline Specific Electives (DSE) in forth semester 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 all faculty members of Department of Zoology.
3. Each student may study any one out of the given electives (I, II, III and IV).
4. Elective papers will be distributed among the students on the basis of merit/choice.
5. The project work/dissertation will be carried out only in the field of respective elective papers (I, II, III and IV) opted by the students.

Abbreviations:

CC= Core Course

DSE= Discipline Specific Electives

DSE: II = Mammalian Reproductive Physiology and Endocrinology

DSE: III= Fish Biology

CCA= Continuous Comprehensive Assessment

OE= Open Elective

DSE: I= Biochemistry and Molecular Biology

DSE: IV= Toxicology

ESE= End-Semester Examinations

Prof. S K Prasad

(External Expert)

Dr. Rohit Seth

(Member)

Dr. S K Verma

(Member)

Prof. LVKS Bhaskar

(HOD)