

**DEPARTMENT OF ANIMAL SCIENCE
SCHOOL OF LIFE SCIENCES
BHARATHIDASAN UNIVERSITY
TIRUCHIRAPPALLI - 620 024**

**M.Sc., Zoology (Program Code: 2PSZOO)
Course Structure (CBCS)
Academic year 2017-2018 onwards**

Program General Objective:

The general objective of Master program of Zoology is to prepare competitive graduates having good skills in broad range of biological sciences with intellectual challenge. Program's curriculum designed to help the students to understand, preserve the biodiversity and our environment, and gain knowledge about the structure, function of living systems. Program integrates core biological principles with the flexibility to tailor students' requirements and interests.

Program's Specific Objectives:

- To provide profound knowledge of fundamentals in zoology and the professional application of modern biology.
- To develop competencies for professional work, practical scientific training in special courses, seminars and field trips.
- Students to develop their own interest, elective modules allow them to develop / select the specialisation in various directions and methods of zoological research.
- Train the students in modern techniques, which are the core work inside and outside the research sector.
- To train the students with best teaching practices, analyze current research, learn to communicate complex topics and explore biology concepts within the context of real-world examples.
- Students center their experience through the master thesis, focused on a specific research question, working with a well-equipped research facilities, research mentoring with personal attention help them to succeed

Program Outcome:

- M.Sc., Zoology program produces post-graduates who have great readiness in playing active role either in government or non government organization.
- Students developed analytical and creative thinking from the conducive research environments and interacting with scholars/ faculties
- Students exhibits technical and scientific judgments related to their area of specialization and to general aspects of biology
- Students experienced the use and application of available technologies to understand and to answer questions with scientific nature.
- Course modules enrich them in advanced interdisciplinary knowledge and motivate to pursue academic, research and health-related profession.

BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI - 620 024

DEPARTMENT OF ANIMAL SCIENCE

M.Sc., ZOOLOGY (Program Code: 2PSZOO)

Course Structure (CBCS)

From Academic year 2017-2018 onwards

Course Type	Course Code	Title of the Course	Hrs /Week	Credits	Exam. Hrs.	Marks		
						CIA	ESE	Total
SEMESTER I								
Any four core course from I-V								
Core I	17ZOOC11	Animal Diversity	4	4	3	25	75	100
Core II	17ZOOC12	Cell Biology	4	4	3	25	75	100
Core III	17ZOOC13	Biochemistry	4	4	3	25	75	100
Core IV	17ZOOC14	Genetics and Evolution	4	4	3	25	75	100
Core V	17ZOOC15	Wild Life Biology and Conservation	4	4	3	25	75	100
Core VI	17ZOOC16	Laboratory Course -I (Animal Diversity)	3	3	3	40	60	100
Core VII	17ZOOC17	Laboratory Course -II (Cell Biology)	3	3	3	40	60	100
Core VIII	17ZOOC18	Laboratory Course -III (Biochemistry)	3	3	3	40	60	100
Total			25	25				700
	17ZOOADC19	Basic Clinical laboratory Techniques	2	2	3	25	75	100
SEMESTER II								
Any four core course from IX-XIII								
Core IX	17ZOOC21	Environmental Biology	4	4	3	25	75	100
Core X	17ZOOC22	Developmental Biology	4	4	3	25	75	100
Core XI	17ZOOC23	Molecular Biology	4	4	3	25	75	100
Core XII	17ZOOC24	Animal Physiology	4	4	3	25	75	
Core XIII	17ZOOC25	Animal Behaviour	4	4	3	25	75	100
Core XIV	17ZOOC26	Laboratory Course -IV (Environmental Biology)	3	3	3	40	60	100
Core XV	17ZOOC27	Laboratory Course-V (Developmental Biology)	3	3	3	40	60	100

Core XVI	17ZOOC28	Laboratory Course-VI (Molecular Biology)	3	3	3	40	60	100
Core XVII	17ZOOC29	Laboratory Course-VI I (Animal Physiology)	3	3	3	40	60	100
Any one from following								
Major Elective -I	17ZOOME21 17ZOOME22 17ZOOME23	Aquaculture and Fisheries / Animals on Commercial Interest/ Cancer Biology	4	2	3	25	75	100
Any one from following								
Non-Major Elective -I	17ZOONME21 17ZOONME22	Pheromone Technology/ Environment and Health	3	2	3	25	75	100
Total			32	32				1000
	17ZOOADC23	Ornamental Fish breeding Techniques	2	2	3	25	75	100

SEMESTER III								
Any three core course from XVIII-XXII								
Core XVIII	17ZOOC31	General Microbiology	4	4	3	25	75	100
Core XIX	17ZOOC32	Immunology	4	4	3	25	75	100
Core XX	17ZOOC33	Animal Cell culture	4	4	3	25	75	100
Core XXI	17ZOOC34	Research Methods	4	4	3	25	75	100
Core XXII	17ZOOC35	Laboratory Course - VIII (General Microbiology)	3	3	3	40	60	100
Core XXIII	17ZOOC36	Laboratory Course -IX (Immunology)	3	3	3	40	60	100
Core XXIV	17ZOOC37	Laboratory Course - X (Animal Cell culture)	3	3	3	40	60	100
Any one from following								
Major Elective II	17ZOOME31 17ZOOME32 17ZOOME33	Genomics and Proteomics /Nanotechnology/ Infertility Management	4	2	3	25	75	100
Any one from following								
Non-Major Elective II	17ZOONME31 17ZOONME32	Aquaculture/ Technology Molecular Evolution	3	2	3	25	75	100
Total			28	25				800
	17ZOOADC33	Apiculture	2	2	3	25	75	100
	17ZOOADC34	Sericulture	2	2	3	25	75	100
SEMESTER IV								
PW	17ZOOPW41	Project Work	25	8	---	50	150	200
Total Credits				90				2600