



Department of Zoology

Bhaskaracharya College of Applied Sciences
(University of Delhi)
Sec -2, Phase - 1, Dwarka, New Delhi -110075

About the Department

Zoology, the branch of biological science that deals with study of the animal kingdom, has captured the interest of human race since time immemorial. The field saw its genesis through the works of great scientists like Aristotle and Galen, and since then it has gained tremendous momentum in exploring various aspects of the animal kingdom. Under the domain of Zoology, we are now capable of understanding the evolution, the taxonomy & systematics, the morphology, the physiology, the biochemical & molecular aspects, the genetic basis, the process of embryo development and many more aspects of animal world. Zoology has a huge potential in the field for research. At present, many significant discoveries are coming from the research being carried out in this field that are directly related to the benefit of human and animal husbandry. The future scope is not only limited to research but extends to various other professional roles such as jobs in academic institutions, pharmaceutical industry, pathological testing laboratories, forest and animal conservation organizations, government and non-government Departments related to agriculture & animal husbandry, etc. The young and growing mind of an undergraduate student should be nurtured graciously and cautiously. It is the best stage of one's life to develop a view point about oneself and the surroundings. Taking this into consideration, Bhaskaracharya College of Applied Sciences introduced B.Sc. (H) Zoology in the academic session of 2017-18 to provide an opportunity to the undergraduate students to understand the biological life within and around them. The curriculum of this course provides comprehensive theoretical as well as practical knowledge of Zoology. Several core papers are taught during the three year span of this course such as Non-Chordates, Chordates, Cell Biology, Ecology, Physiology, Biochemistry, Molecular Biology, Developmental Biology, Genetics, etc. Discipline-specific

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papers such as Biotechnology, Endocrinology, Animal Behavior & Chronobiology, Immunology, etc. are also offered to have in-depth knowledge about these topics. The curriculum also focuses on enhancing the skill of undergraduate students by offering skill-enhancement papers (Sericulture, Apiculture, Fisheries, etc.) so that they may have a future as entrepreneurs or may join skill-based industries. Since its genesis in 2017, the Department of Zoology of Bhaskaracharya College of Applied Sciences has diligently worked to deliver the knowledge of Zoology to its students in best possible way. The Department also encourages its students to join research projects and summer internship programs. The curriculum of B.Sc. (H) Zoology aims to provide out-of-classroom knowledge of the subject. This is executed by the Department by conducting trips to Zoological parks, research organizations, and Institutes related to sericulture, apiculture, etc. The following activities were conducted in academic year 2018-19:

- One-day visit to the Department of Entomology, Indian Agricultural Research Institute, Delhi on March 05, 2020
- One-day workshop on “Reproductive Biology” and visit to the Animal House Facility at Department of Zoology, University of Delhi on February 14, 2020
- An educational trip to Madhav National Park, Shivpuri, Madhya Pradesh on September 15, 2019

The Department has been actively involved in organizing workshops to provide practical experience to its students. The students are also encouraged to participate in various scientific and extra-curricular events, within and outside college. In the academic year 2018-19, the following events were organized/participated in:

- Actively participated in “आरोहण: RCB Open Day”, an outreach program on National Science Day held in Regional Centre for Biotechnology, Faridabad on February 28, 2020
- Organized annual zoological festival ‘ZOOSANGAM’ on February 07, 2020 under the umbrella of zoological society ‘ERANKO’.

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- Organized one-day workshop on “Immunology” at Department of Zoology, University of Delhi on September 26, 2019

The involvement of the Department in students’ life does not end at the level of academics. To guide, counsel and prepare students in facing the current and future hurdles of life, especially related to career and mental health, is also the

responsibility of the Department. In this regard, the Department of Zoology has carried out these steps:

- Organized a one-day seminar entitled “The Dilemma of Choosing a Career” on March 04, 2020 where speakers counseled the students about the career options available after graduation
- Regular mentorship program where each student is allotted a faculty member as a mentor and regular meetings are held to discuss the problems that are being faced by the student related to any aspect of his/her life

The infrastructure of Department of Zoology is at par with any other biological science institute. The Department has two well-equipped laboratories with projector facility and high-end scientific instruments for conducting practical’s and research such as Binocular and Trinocular microscopes, B.O.D. incubator, PC-based UV-Vis Spectrophotometer, Refrigerated centrifuge, Deep Freezer, Digital blood cell counter, Digital hemoglobin reader, Digital blood analyzer, pH-meter, Electronic balance, Vortex shaker, Electrophoresis chamber, UV trans-illuminator, Ice Flaking machine, Glucometer etc. Also, a tissue-culture laboratory is present that is furnished with all the essential equipments like Laminar Flow, Orbital Shaker, Growth chamber, etc.

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Admission Eligibility Criteria

Minimum requirements for the students who have passed the qualifying examinations and are seeking admission in Zoology Department of Bhaskaracharya College of Applied Science, University of Delhi, is:

- ❖ For B.Sc. (Hons.) Zoology, 55% or more marks in the aggregate of Physics, Chemistry, Biology/Biotechnology (PCB/PCBt) (Practical & Theory together) And passing in one compulsory language i.e. English with 50% marks.

Faculty Details

S.No	Name of Faculty	Qualifications	Specialization
1)	Dr. Anil K. Bali (<i>Teacher-In-Charge</i>)	D.Phil. (University of Sussex, U.K.)	Zoology, Molecular Biology & Biotechnology

Semester-wise distribution of Courses under CBCS (Revised)

SEMESTER I		SEMESTER II	
C1	Non-chordates I: Protista to Pseudocoelomates	C3	Non-Chordates II: Coelomates
C2	Principles of Ecology	C4	Cell Biology
AECC1	English/MIL Communication or EVS	AECC2	EVS or English/MIL Communication
GE1	Generic Elective	GE2	Generic Elective
SEMESTER III		SEMESTER IV	
C5	Diversity of Chordates	C8	Comparative Anatomy of Vertebrates
C6	Physiology: controlling and coordinating system	C9	Physiology: Life Sustaining Systems
C7	Fundamentals of Biochemistry	C10	Biochemistry of Metabolic Processes
SEC1	Skill-Enhancement Elective Course	SEC2	Skill-Enhancement Elective Course
GE3	Generic Elective	GE4	Generic Elective
SEMESTER V		SEMESTER VI	
C11	Molecular Biology	C13	Developmental Biology

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C12	Principles of Genetics	C14	Evolutionary Biology		
DSE1	Discipline Specific Elective	DSE3	Discipline Specific Elective		
DSE2	Discipline Specific Elective	DSE4	Discipline Specific Elective		
Abbreviations used for Course					
C	Core Course				
AECC	Ability Enhancement compulsory Course				
GE	Generic Elective course				
SEC	Skill Enhancement Elective Course				
DSE	Discipline Specific Elective course				
SEC: Skill-Enhancement Elective Courses <i>(any one paper per semester in semesters 3rd and 4th)</i>		SEC1: Apiculture SEC2: Aquarium and Fish Keeping SEC3: Medical Diagnostics SEC4: Research Methodology SEC5: Sericulture SEC6: Genetic Counselling SEC7: Environmental Audit			
DSE: Discipline Specific Elective <i>(any two paper per semester in semesters 5th and 6th)</i>		DSE1: Animal Behavior and Chronobiology DSE2: Basics of Neuroscience DSE3: Animal Biotechnology DSE4: Biology of Insects DSE5: Computational Biology DSE6: Parasitology DSE7: Endocrinology DSE8: Fish and Fisheries DSE9: Immunology DSE11: Reproductive Biology DSE12: Wildlife Conservation and Management			
GE : Generic Electives <i>(any one paper per semester in semesters 1st to 4th.</i>		GE-1 (First Semester): Insect Vector and Diseases GE-3 (Third Semester): Food, Nutrition and Health			
Category wise seat distribution					
Total Seats	UR	SC	ST	OBC	EWS
40	16	6	3	11	4

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