



TITLE	ENTOMOLOGY
Programme Director	Dr.M.Jayashankar M.Phil., Ph.D jay81zoology@gmail.com
Department	Zoology
Hours (Credit)	60 hrs (2 credits)
Course Fee	3000 INR
Objectives of the Course	
<ul style="list-style-type: none"> • Exposure to concepts and practical aspects of the fascinating world of insects • To enable students to pursue career in the field of Zoology, Forest Service, Industrial Entomology, Forensic Entomology and Economic Entomology 	
Syllabus	
Theory	<ol style="list-style-type: none"> 1. Introduction to Entomology: Aims, objectives and scope. Entomology in the Indian Context. 2. Morphology and Taxonomy of Insects: External morphology, sense organs, Taxonomic keys, collection and preservation techniques. 3. Applied Entomology: Basics of helminthology, arachnology, malacology, forest and forensic entomology. Parasitology (Identification of vectors and vector borne diseases of human health and veterinary importance), 4. Agricultural Entomology: Phenology, IAS, IPM, Insect-microbe interactions, , economic entomology 5. Insect Ecology and Conservation: Assessment of diversity, Ecotourism, Insect-plant coevolution, foraging behavior of social insects, insect migration. Climate change impacts on Entomofauna and conservation initiatives.
Practical	<ol style="list-style-type: none"> 1. Study of insect orders and their identification 2. Documenting insect diversity (photography and documentary), 3. Collection and curation: Methods of sampling insects, Tools (Net, pheromone traps, baits) and Curation (Pinning, spreading, pointing and mounting) 4. Trap catch analysis: Light and pit-fall 5. Insect cultures (Drosophila and mealy bug), Insect model organisms and mutants 6. Studying insect behaviour (mud puddle, fruit trays/baits, pollination of stingless bees, nest building in weaver ants, fruit stall visitors) 7. <i>*Technical tours</i> (Entomology museums and Bio-control laboratories to learn rearing and mass production of parasitoids and common predators)
Project dissertation	Scientific Writing and Presentation: Analysis and interpretation of research data, report writing, research paper and presentation skills. Minor research project (Individual submission and viva)