

Course Synopsis- Animal Life and Diversity- ZYU3500

Department of Zoology

Course Code	ZYU3500					
Level	3					
Course Title	Animal life and diversity					
Credit value	5 credits					
Core/Optional	Core					
Prerequisites	Pass in Zoology/Biology in A/L or Foundation in Science/ Foundation Courses					
Hourly Breakdown	Theory		Practical hours	Independent Learning	Assessments	Total hrs
	Sessions 30X 2=60 hrs	DS = 15 hrs	Lab + field = 42 hrs	<ul style="list-style-type: none"> ▪ Sessions 30 x 3 = 90 hrs ▪ Online =8 hrs ▪ Lab/field (42x 0.5) = 21 hrs ▪ PASS= 10 hrs 	<ul style="list-style-type: none"> ▪ Continuous Assessments (CA) = 3hrs ▪ Practical assessments (PA) = 0.5hr ▪ Museum =0.5hr 	250 hrs
Course Aim/s.	Provide a broad knowledge of the diversity in animal forms, functions and adaptations, provide an overview of the diversity of animal groups and understanding basic concepts of taxonomy and animal classification, provide a deeper appreciation of the beauty of the natural world and its complexity, to apply the knowledge of biological diversity to our daily life and culture.					
PLOs addressed by course	<p>PLO1: Knowledge: Explain the fundamental, principles and broader knowledge pertaining to the chosen science disciplines offered for the degree.</p> <p>PLO2: Practical Knowledge and Application. Demonstrate the competency to use the knowledge and practical skills appropriately.</p> <p>PLO3: Communication: Demonstrate the competency in communicating efficiently and effectively to present information, ideas and concepts to the scientific community as well as to the wider society.</p> <p>PLO4: Individual Work, Team Work and Leadership: Demonstrate the competency in working independently and in groups in addressing issues in multi-disciplinary environments and completing the tasks on time through collaborative learning while exhibiting leadership.</p> <p>PLO5: Creativity and Problem Solving: Identify and analyze problems using quantitative and/or qualitative approaches using scientific methodology to provide valid conclusions.</p> <p>PLO7: Information and Communication Technology Literate: Demonstrate the competency of using Information and Communication Technology for numerical and statistical analysis, and in day to day applications.</p> <p>PLO9: Lifelong Learning: Develop the capacity to foresee new trends and their impacts and continuously update knowledge and develop skills willingly to meet those future challenges.</p>					
Course Learning Outcomes (CLO)	<p>At the completion of this course student will be able to</p> <p>CLO1: Explain the concepts and principles related to the general body organization of animal phyla, morphological diversity and adaptive radiation (PLO1)</p> <p>CLO2: Identify animals and animal components by interpreting morphological features, internal anatomy, quantitative data, taxonomic keys and checklists. (PLO1, PLO2, PLO3, PLO7)</p> <p>CLO3: Develop comprehensive understanding of the key features of major animal groups and identify the adaptations of animals for different lifestyles in different habitats (PLO1, PLO2, PLO3, PLO4, PLO5)</p> <p>CLO4: Demonstrate skills in the collection, preservation, storage and description of reference collections. (PLO2, PLO3, PLO4, PLO7, PLO9)</p> <p>CLO5: interpret and communicate the finding of a fauna survey (PLO3.PLO5, PLO7, PLO9)</p>					

Content(Main topics, sub topics)	<p>Protistans and the lower metazoans - kingdom Protista, An introduction to kingdom Animalia, phylum Porifera, Cnidaria and Ctenophora</p> <p>Animals without a true coelom- Phylum Platyhelminthes and Nematoda</p> <p>Limbless protostomes- phylum Annelida and Mollusca</p> <p>Joint legged protostomes- phylum Arthropoda</p> <p>Early deuterostomes -Phylum Echinodermata, Hemichordates, The chordate organization and primitive chordates- Urochordata and Cephalochordates,</p> <p>Ectothermic vertebrates- vertebrate organization and its jawless members, Introduction to aquatic gnathostomes, class Chondrichthyes, Osteichthyes, Amphibia and Reptilia</p> <p>Endothermic vertebrates-Feathered vertebrates, diversity of feathered vertebrates, Introduction to mammals, Monotremes and marsupials Primitive placentals, placental carnivores, placental herbivores, Primates.</p>	
Teaching-Learning methods (TL)	<p>Self-learning/independent learning of self - study (IL)</p> <ul style="list-style-type: none"> ▪ Learning the course contents in course materials in print and web-based materials (SS) ▪ Learning through practical exercises & group work projects (PR) & (GP) ▪ Additional reading materials/ recommended reading (RE) <p>Contact sessions</p> <ul style="list-style-type: none"> ▪ Day schools (discussion sessions) (Non-compulsory) ▪ Laboratory practical exercises (PR) (compulsory) ▪ Field work as group activities (GP) (compulsory) 	
Assessment Strategy	<p>Overall Continuous Assessment Mark (OCAM): 40% Final Assessment: 60%</p>	
	<p>Detail:Theory (70%): NBT: MCQ/Structured – 2x 1.5 hrs</p> <p>Practical (30%): Practical Spot test (PA) 1hr+Museum test (MA) 1 hr</p> <p>OCAM= 70% best NBT + 30% PA+MA (min 30% and attendance for lab and Museum compulsory)</p>	<p>Final Evaluation</p> <p>1 Theory paper: 3 hrs</p> <p>(MCQ / Essay)</p>
Recommended Reading	<ol style="list-style-type: none"> 1. Barnes, R.D. (1987). Invertebrate Zoology. Saunders College Publishers, Philadelphia. 2. Hickman C.P, Robert, L.S. and Hikman, F.M. (1988). Integrated Principles of Zoology. Times, Mirror- Mosby College Publishing, saint Louis. 3. Young, J.Z., (1983) Vertebrates. Oxford University Press, Oxford. 4. Kershan, D.A., (1983) Vertebrate diversity. University tutorial Press, London. 5. Hickman C.P, Robert, L.S. and Larson, A. (2000). Animal diversity McGraw-Hill, New York 	