LS104A	**Animal Biology**	**2 Credits**
Name of the Faculty: Prof. Amal C. Mondal		

S. No.	Topic		Faculty Name/ Contact Hours
1.	**Origin and Evolution of Life**	Theories of the origin of life, early earth, modern self-assembly theories, Oparin Haldane theory of chemical evolution, The Miller- Urey experiment, Organic evolution, Development of evolution theory, Darwin's theory, Origin and evolution of human being.	ACM/1
2.	**Natural selection**	The nature of natural selection, Examples of natural selection, levels of selection, selection of organisms and groups, species selection. Artificial selection, Adaptation: The nature of adaptations, Speciation/	ACM/3
3.	**Animal Diversity, Animal Kingdom, Animal Classification**	Basis of classification, levels of organization (Symmetry, diploblastic and triploblastic organization),Coelom, segmentation, Notochord	ACM/3
4.	**Characteristic features of each Phyla**	Protozoa, Porifera, Cnidaria, Platyhelminthes, Nematodes, Annelida, Arthropoda, Echinodermeta, Hemichordata, Chordata	ACM/3
5.	**Structural organization in Animals**	Animals Tissues: Epithelial Tissue, connective Tissue, Muscle Tissue, Neural Tissue	ACM/3
6.	**Organ systems**	Integumentary system, Muscular and Skeletal system, Digestive system, respiratory system, Circulatory system, Excretory system, nervous system, Sensory and Reproductive systems	ACM/16

Further Reading:

1. Comparative Animal Physiology by Philip C Withers
2. Animal Physiology by Richard W Hill, Gordon A Wyse, Margaret Anderson
3. Animal Physiology: mechanisms and adaptation by David Randall, Warren Burggren, Kathleen French
4. Animal Physiology by R C Sobti
5. Essentials of Animal Physiology by S C Rastogi