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| **Course Code** | ZYU5307 |
| **Level** | 5 |
| **Course Title** | Mammalian Biology  |
| **Credit value** | 03 credits  |
| **Core/Optional** | Optional  |
| **Prerequisites** | None  |
| **Hourly breakdown** | **Theory** | **Practical** | **Independent Learning** | **Assessment** | **Total** |
| Sessions (PPT) 20x1=**20 hrs** | DS hrs = **12 hrs** | Lab (Group presentation) = **12 hrs**   | * Sessions (3x 20) =

**60 hrs** * Online interactive learning =**6 hrs**
* Recommended reading =26 hrs
* Practical=**6 hrs** (0.5x 12 hrs)
* Audio- visual= **5 hrs**
 | * Continuous Assessment test =**2 hrs**
* Group presentation (GP) =**0.5 hrs**
* Online assessment (OA)= 0.5 **hrs**
 | 150 hrs |
| **Course Aim/s.** | To broaden the understanding of mammalian features, origin & distribution, classification, their structural & functional adaptation a to diverse ecosystems. Also, to provide an understanding on interaction of mammals with ecosystems and their conversational status. |
| **PLOs addressed by course**  | **PLO1: Knowledge:** Explain the fundamental, principles and broader knowledge pertaining to the chosen science disciplines offered for the degree.**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.**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. **PLO5: Creativity and Problem Solving:** Identify and analyze problems using quantitative and/or qualitative approaches using scientific methodology to provide valid conclusions. **PLO6: Adaptability and Flexibility:** Demonstrate the ability to adapt to diverse working environments using flexible approaches and strategies. **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.  |
| **Course Learning Outcomes (CLO)** | At the completion of this course, students will be able to:CLO1: Describe the basic characteristic features of mammals and their origin, distribution and classification **(PLO 1)**CLO2: Describe the functional and structural adaptations of mammals to live in diverse ecosystems. **(PLO1)**CLO3: Comment on the ecological, behavioural and economical significance of mammals. **(PLO1, 2)**CLO4: Develop skills of group work, leadership and effective communication in written, oral and online form. **(PLO3, 4, 5, 6, 7)** CLO5: Apply the knowledge acquired in this course to solve issues related to mammals. **(PLO 1,5,6,7)** |
| **Content** **(Main topics, sub topics)**  | **Introduction to mammals**Basic characteristics of mammals, Classification, Evolution, Feeding and Nutrients, Temperature regulation, Reproduction, Neuronal control and Communication in Mammals. **Adaptive radiation and diversity of mammals**Describes basic characteristics and adaptations to mode of life in different groups of mammals: Monotremes, Marsupials, Insectivora, Macroscelidea, Scandetia, Dermoptera,Chiropetra Primates, Xenarthra, Pholidota and Tubulidentata, Carnivora, Cetacea, Rodentia, Lagomorpha, Hyracoidae, Sirenia, Perissodactyla, Artiodacytyla**Ecology, behaviour and conservation of mammals**Ecology, behaviour, conservation and domestication of mammals  |
| **Teaching Learning methods (TL)** | Self-Learning/Independent learning (IL)* Course material in the form of power point presentations and video presentation (20 PPT Sessions) MOODLE LMS- online interaction (Supplementary reading material, quizzes, discussion fora)
* Recommended readings
* Audio-visual
* Preparation of Poster preparation

Contact sessions* Practical sessions-Group presentation – (Poster presentation) (Compulsory)
* Day School (3 DS)- Non-compulsory
* One Compulsory Day School (CDS)
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| **Assessment strategy** | Overall CA Mark (OCAM): 40% | Final Assessment: 60% |
| Details: Continuous Assessment (CA)OCAM= 50% from best NBT +20% other NBT (theory 2 hrs)+ 25% GP (0.5 hrs)+ 05% OA(0.25 hrs) | Theory: 100%1 paper (Essay) – 2 hrs |
| **Recommended** **Readings:** | 1. Vaughan, T. A., Ryan, J. M., & Czaplewski, N. J. (2013). Mammalogy. Jones & Bartlett Publishers.
2. Davis, D. E., & Golley, F. B. (1963). Principles in mammalogy (pp. xiii+-335). New York: Reinhold.
3. Young, J.Z., (1983) Vertebrates. Oxford University Press, Oxford
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