

Lesson Plan  
**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans- Odd Semester (Semester-I)**  
**Session – 2022-23**

**Department- Zoology**

**Name of the Teacher- Dr. Sandeep Kaur (Sec.- A & B)**

**Class- B.Sc. I (Medical)**

**Sections- A & B**

**Subject- Zoology**

**Paper–I: Biodiversity & Cell Biology-I (ZOO-101)**

Month	Date		Topics to be Covered	Academic Activity to be Undertaken
	From	To		
August	25.08.2022	31.08.2022	<b>Organization of Cell</b> - Concept of Prokaryotic and Eukaryotic cell, extra nuclear and nuclear organization of cell.	Powerpoint presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 28.08.2022</b>				
September	01.09.2022	30.09.2022	<b>Detailed study of the following protozoan types:</b> <i>Amoeba, Paramecium, Plasmodium and Entamoeba</i>  <b>Classification up to orders with ecological notes and economic importance (if any) of the following:</b> <i>Entamoeba, Trypanosoma, Giardia, Noctiluca, Eimeria, Opalina, Vorticella, Balantidium and Nyctotherus.</i>	Powerpoint presentation, group discussion, assignments, Flipped classroom method  Practical demonstration using museum specimens, group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.09.2022</b>				
October	01.10.2022	31.10.2022	<b>Detailed study of the following animal types:</b> <i>Sycon</i>  <b>Classification up to orders with ecological notes and economic importance (if any) of the following:</b> <i>Grantia, Euplectella, Hyalonema and Spongilla.</i>  <b>Detailed study of the following animal types:</b> <i>Obelia</i> Classification up to orders with ecological notes and economic importance (if any) of the following: <i>Hydra, Sertularia, Plumularia, Obelia, Tubularia, Bougainvillea, Porpita, Velella, Physalia, Rhizostoma, Millipora, Aurelia, Alcyonium, Tubipora, Zoanthus, Metridium, Madrepora, Favia, Fungia and Astrangia.</i>  <b>Mitochondria</b> - Structure, mitochondrial	Powerpoint presentation, group discussion, assignments, Flipped classroom method  Practical demonstration using museum specimens, group discussions

			enzymes and the role of mitochondria in respiration. Mitochondrial DNA.  <b>MST</b>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 03.10.2022</b>				
November	01.11.2022	25.11.2022	<p><b>Methods in Cell Biology</b> - Principles and applications of light (simple, compound &amp; phase contrast) and electron (SEM &amp; TEM) microscopes Fixation &amp; fixatives, staining techniques (simple and double staining).</p> <p><b>Endoplasmic reticulum</b> - Structure, types, associated enzymes and functions</p> <p><b>Golgi complex</b> - Structure, associated enzymes and functions.</p> <p><b>Plasma membrane</b> - Structure with particular references to Fluid Mosaic Model, Osmosis, active and passive transport, endocytosis and exocytosis.</p>	Powerpoint presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 22.11.2022</b>				
<b>End semester Examination 28.11.2022 to 31.12.2022</b>				

**Lesson Plan**  
**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans- Even Semester (Semester-II)**  
**Session – 2022-23**

**Department- Zoology**

**Name of the Teacher- Dr. Sandeep Kaur (Sec.- A& B)**

**Class- B.Sc. I (Medical)**

**Sections- A & B**

**Subject- Zoology**

**Paper–I: Biodiversity & Ecology -I (ZOO-201)**

Month	Date		Topics to be Covered	Academic Activity to be Undertaken
	From	To		
January	16.01.2023	31.01.2023	<p><b>Detailed study of the following animal type:</b>                      Arthropoda – <i>Periplaneta</i>                      Social organizations in insects (honey bee and termite).  <b>Classification upto orders with brief ecological note and economic importance (if any) of the following:</b>                      Arthropoda: <i>Apis</i>, <i>Lepisma</i> (Silver Fish), <i>Schistocerca</i> (Locust), <i>Poecilocus</i> (Ak grasshopper) <i>Gryllus</i> (Cricket), <i>Mantis</i> (Praying Mantis), <i>Cicada</i>, <i>Forficula</i> (Earwig), <i>Cimex</i>, <i>carabaeus</i> (Dung beetle), <i>Agrian</i> (Dragon fly), <i>Odontotermes</i> (Termite queen), <i>Cimex</i> (bed bug), <i>Cicindela</i> (Tiger beetle), <i>Polistes</i> (Wasp), <i>Bombyx</i> (Silk moth).</p>	<p>Powerpoint presentation, group discussion, assignments, Flipped classroom method</p> <p>Practical demonstration using museum specimens, group discussions</p>
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.01.2023</b>				
February	01.02.2023	28.02.2023	<p><b>Detailed study of the following animal type:</b> Arthropoda - Prawn                      Life cycle of <i>Anopheles</i> and <i>Culex</i></p> <p><b>Classification upto orders with brief ecological note and economic importance (if any) of the following:</b>  <i>Peripatus</i>, Prawn, Lobster, <i>Cancer</i> (Crab), <i>Sacculina</i>, <i>Eupagurus</i> (Hermit crab), <i>Lepas</i>, <i>Balanus</i>, <i>Julus</i> (Millipede), <i>Scolopendra</i> (Centipede), <i>Palamnaeus</i> (Scorpion), <i>Aranea</i> (Spider) and <i>Limulus</i> (King crab).</p> <p><b>MST</b></p>	<p>Powerpoint presentation, group discussion, assignments, Flipped classroom method</p> <p>Practical demonstration using museum specimens, group discussions</p>
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.02.2023</b>				

March	01.03. 2023	31.03. 2023	<p><b>Ecology</b> - Subdivisions and Scope of ecology.</p> <p><b>Ecosystem</b> - Components, ecological energetics, food web, introduction to major ecosystems of the world.</p> <p><b>Ecological factors</b> - Temperature, light and soil as ecological factors.</p> <p><b>Nutrients</b> - Biogeochemical cycles &amp; concept of limiting factors.</p>	Powerpoint presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.03.2023</b>				
April	01.04. 2023	29.04. 2023	<p><b>Adaptations:</b> Ecological, Morphological, physiological and behavioral adaptations in animals in different habitats.</p> <p><b>Population-</b> Characteristics and regulation of population.</p>	Powerpoint presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 03.04.2023</b>				
<b>End semester Examination 02.05.2023 to 03.06.2023</b>				