

Curriculum plan (Odd Semester 2024-2025)

Teacher Name: **Dr. Neeti Pandey**

Paper name: **Principle of Genetics**

Class type: Zoology III year (5th sem)

Unit to be taken	Allocated lectures	Month wise schedule to be followed	Tests/Assignments/ Revision/Presentations etc
Practical Simulation exercises using beads or seeds to study the gene interactions: 9:3:4; 12:3:1; 9:7; 9:3:3:1 (comb shapes in roosters) and verification of ratios by using Chi square analysis.	4	August, September	Practical
Practical <ul style="list-style-type: none"> Linkage maps based on data (two - point and three - point crossing over) from <i>Drosophila</i>. Pedigree analysis of Autosomal Dominant trait, Autosomal recessive trait, X-linked, Dominant traits, X-linked recessive traits, Y-linked traits and mitochondrial traits. Use of probability in solving problems of genetics (Sum rule, Multiplication rule & Binomial expansion) 	4	September, October	Practical and Test
Practical <ul style="list-style-type: none"> Human Karyotypes, Human chromosomal disorders & single gene disorders. 	4	October, November	Practical, Revision, Project, and Chart

<ul style="list-style-type: none">• Gene mapping (order and distance) using data from interrupted mating experiments in bacteria.			
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