

Lesson Plan
Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans- Odd Semester (Semester-V)
Session – 2018-19

Department- Zoology

Names of the Teachers- Dr. Neetu & Ms. Divya Sharma

Class- B.Sc. III (Medical)

Sections- A & B

Subject- Zoology

Paper–I: Developmental Biology (ZOO-501)

Month	Date		Topics to be Covered	Academic Activity Undertaken
	From	To		
July	23.07.2019	31.07.2019	Gametogenesis with particular reference to differentiation of spermatozoa	Lecture method, PPT
August	01.08.2019	31.08.2019	Vitellogenesis, role of follicle/subtesticular cells in gametogenesis Egg maturation, egg membranes, polarity of egg	Lecture method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 04.09.19				
September	01.09.2019	30.09.2019	Fertilization, parthenogenesis Cleavage: Types of cleavage patterns depending upon amount and distribution of yolk and position of spindle. Blastula and types of blastula. Fate maps of chick and frog embryos.	Lecture method, PPT, Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 05.10.19				
October	01.10.2019	31.10.2019	Induction: cell to cell interactions, juxtacrine, paracrine, gap junctions; basic concepts of organizers and inducers and their role Determination and differentiation Development up to three germ layers in <i>Herdmania</i> , <i>Amphioxus</i> , frog, chick and rabbit MST	Lecture method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.11.19				
November	01.11.2019	30.11.2019	Foetal membranes, their formation and role Mammalian placenta- its formation, types and functions Metamorphosis in <i>Herdmania</i> and <i>Rana</i> (frog) Revision and Class test	Lecture method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 30.11.19				

Lesson Plan
Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans- Even Semester (Semester-VI)
Session – 2018-19
Department- Zoology

Names of the Teachers- Dr. Neetu & Ms. Divya Sharma
Class- B.Sc. III (Medical)
Sections- A & B
Subject- Zoology
Paper-I: Genetics (ZOO- 601)

Month	Date		Topics to be Covered	Academic Activity Undertaken
	From	To		
January	09.01.2020	31.01.2020	<p>Mendelism and Mendelian Ratios Modification of Mendelian ratios Non-allelic gene interaction, Modified F2 ratios (9:7, 9:3:4, 9:3:3:1, 12:3:1, 13:3,15:1, 9:6:1)</p> <p>Gene modifications due to incomplete dominance, lethal factors (2:1), Pleiotropic genes</p> <p>Multiple Alleles: Blood group inheritance, eye colour in <i>Drosophila</i>, pseudo-allelism</p> <p>Multiple factors: Qualitative and quantitative characters, inheritance of quantitative traits (skin colour in man)</p>	Lecture method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.02.20				
February	01.02.2020	28.02.2020	<p>Linkage, crossing over and recombination: Linkage, sex-linked characters, crossing over, frequency of crossing over, cytological basis of crossing over, synaptonemal complex. Recombination in Fungi, (tetrad analysis).</p> <p>Gene and Genetic Code: Structure of nucleic acids (DNA & RNA). Replication of DNA and transcription. Expression of gene (protein synthesis in Prokaryotes and Eukaryotes)</p> <p>Properties of genetic code, codon assignment, wobble hypothesis</p> <p>Extranuclear inheritance: Kappa particles in <i>Paramecium</i></p>	Lecture method, PPT, Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 05.03.20				

March	01.03.2020	31.03.2020	<p>Mutations: Spontaneous and induced mutations, physical and chemical mutagens, Detection of mutations in <i>Drosophila</i>. Inborn errors of metabolism in man (Phenylketonuria, Alcaptonuria, Albinism). Somatic mutations and carcinogenesis</p> <p>Regulation of gene expression in prokaryotes (Operon model) and in eukaryotes</p> <p>MST</p>	<p>Lecture method, PPT,</p> <p>Lecture method, PPT, Videos</p>
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.04.20				
April	01.04.2020	18.04.2020	<p>Population genetics: Equilibrium of gene frequencies and Hardy Weinberg Law</p> <p>Genetic recombination in bacteria (conjugation, transduction and transformation), plasmids</p> <p>Applied Genetics : Recombinant DNA, genetic cloning and its applications in medicine and agriculture, DNA finger printing</p> <p>Revision and Class test</p>	Lecture method, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 20.04.20				