

Curriculum plan (Odd Semester 2025)

Teacher Name: **Mr. Gulshan Yadav**

Paper name: **DSC: Biology of Cell: Structure and Function**

Course: **Zoology (Hons.) - 1st Year (Sem I); Group: All (Practical)**

Paper shared with: **Dr. P.P. Saini**

Date	Practical
01/08/2025	Microscopy: Compound microscope: principle, components, and handling; Phase contrast microscope; Electron microscope; Differential Interference Contrast (DIC) Microscope
08/08/2025	Principle and types of cell fixation and staining; Cell fractionation.
22/08/2025	To study prokaryotic cells by Gram staining and eukaryotic cells (cheek cells) by hematoxylin/methylene blue.
12/09/2025	To study the effect of hypotonic, isotonic, and hypertonic solutions on cell permeability.
19/09/2025	Preparation of a temporary slide of squashed and stained onion root tip to study various stages of mitosis.
26/09/2025	Preparation of a temporary slide of squashed and stained onion root tip to study various stages of mitosis. (Repeat)
03/10/2025	Study the effect of colchicine on mitosis at 24 hrs and 48 hrs.
17/10/2025	Study of various stages of meiosis through permanent slides
24/10/2025	Preparation of stained mount to show the presence of Barr body in human female blood cells/cheek cells.
31/10/2025	Cytochemical demonstration of: (a) DNA by Feulgen reaction