Semester	AUG 2022
Open to semester	1
Course code	**BI1123**
Course title	**Experimental Biology (Aug 2022)**
Credits	3 /
Course Coordinator & participating faculty (if any)	Krishanpal Karmodiya*, Kundan Sengupta, Richa Rikhy, Nixon Abraham, Anjan Banerjee
Nature of Course	Lab
Pre-requisites	None
Objectives (goals, type of students for whom useful, outcome etc)	The theme for the practical course is “Looking at cells in action”. The course aims to make students understand the joy of doing experiments in biology. Further, students will learn about experimental errors. Finally, students will also learn to keep good records of the experiments performed in a lab journal.
Course contents (details of topics /sections with no. of lectures for each)	a. Basics of microscopy b. Using the microscope to observe various different microorganisms c. Model organisms d. Staining of blood cells and micrometry of different cells e. Bacterial staining – differentiating between gram positive and gram negative bacteria f. Osmosis / Plasmolysis g. Leaf stomatal density h. Mitosis / Meiosis i. Metaphase chromosome spread j. Pure culture techniques – media, streaking, pour plates k. Enumeration of bacteria
Evaluation /assessment	End-Sem Examination-35% Mid-Sem Examination-35% Others-Evaluation will be done on a continuous basis based on the performance of students and it will be reflected in lab journal evaluations. Students will have to write a lab journal with detailed account of work done in the lab. 1. Lab journal - 30%? 2. Mid-Sem – 35% 3. End-Sem – 35%

	%
Suggested readings (with full list of authors, publisher, year, edn etc.)	Text Book(s) Lectures and associated reading provided by faculty during the course Raven, P.H. and Johnson, G.B. (1999) Biology. Edition Five. WCB/McGraw-Hill, pp. 1284.