| Semester  | AUG 2022  |
|---|---|
| Open to semester  | 13,21   |
| Course code   | BI6382  |
| Course title  | Physical Biology - Concepts and Experiments   |
| Credits   | /2  |
| Course Coordinator & participating faculty (if any)                               | Thomas Pucadyil   |
| Nature of Course  | Lectures  |
| Pre-requisites  | None  |
| Objectives (goals, type of<br>students for whom useful,<br>outcome etc)           | This is a PhD-level course for those interested in<br>understanding cell biology from a quantitative and analytical<br>perspective. The emphasis will be to understand core physical<br>principles behind cellular processes. |
| Course contents (details of<br>topics /sections with no. of<br>lectures for each) | Course content will range from equilibrium binding, partitioning, diffusion, networks, dynamics of proteins and membranes among others.   |
| Evaluation /assessment  | End-Sem Examination-50%<br>Mid-Sem Examination-50%<br>Others-%  |
| Suggested readings (with full<br>list of authors, publisher, year,<br>edn etc.)   | Physical Biology of the Cell by Rob Phillips, Jané Kondev,<br>Julie Theriot, Hernan Garcia.   |
|   | Cell Biology by the Numbers by Ron Milo and Rob Phillips<br>Primary literature  |