

Topic Guide for Physical Biology Module-Lecture 2

Course BB101 is comparatively new as part of the undergraduate curriculum at IIT Bombay. This course being taught only since last two years. Unfortunately, there is no single text book which instructors can use to teach module II at the level of undergraduates. This is why instructor has to use following three different text books to teach the Module II

Reference Book 1: Physical Biology of the cell, R. Phillips, J. Kondev, J. Theriot, H. Garcia (Publisher: Garland Science)

Reference Book 2: Biological Physics, Philip Nelson (Publisher: W. H. Freeman)

Reference Book 3: Mechanics of Motor Proteins and the Cytoskeleton, Jonathan Howard (Publisher: Sinauer Associates Inc.)

Below I have listed where one can find topics discuss in lectures

Lecture2

Topic: Viscosity and fluid flow, Newtonian fluid, Viscous Critical Force, Reynolds number

[Chapter 5 of Reference Book 2](#)

Topic: Life at low Reynolds number, Symmetry-Breaking (natural microorganisms)

[Chapter 5 of Reference Book 2](#)

Other topics: [Lecture notes are enough as some of these topics have been taught using research papers](#)