

Course Outline

- Mitosis
- Meiosis
- Structure, nutrition growth & Reproduction
- Economic importance of Bacteria, viruses & Fungi

Topic 1 - The Cell

- Structure and functions of the cell
- Brief history of cell biology
- Differences between Prokaryotic and Eukaryotic Cell
- The cell cycles (Mitosis & Meiosis)

Topic 2 - Bacteria

- Bacterial morphology
- The bacterial cell wall and gram stain
- Cell surface structures
- Cell inclusions
- Nutritional requirements
- Growth and Reproduction
- Growth
- Economic importance

Topic 3 - Fungi

- Morphology of Fungi
- Nutrition
- Growth and Reproduction
- Economic importance

Topic 4 - Viruses

- Characteristics of viruses
- Morphology
- Replication/Life Cycle of Bacteriophage and HIV
- Economic importance of viruses

Topic 5 - Genetic recombination

- Conjunction
- Transformation
- Transduction
- Application

Topic 6 - Microbia infections

- Modes And mechanism of disease transmission
- Disease agents and their sources
- Control and common infections diseases

Email: microbio2018@gmail.com