

PGDBI - 6  
MICROBIOLOGY

Units	Topics
1	History of Microbiology <ul style="list-style-type: none"><li>◆ Introduction to Microbiology</li><li>◆ Achievements in Microbiology</li></ul>
2	Scope of Microbiology <ul style="list-style-type: none"><li>◆ Microbiology Classification</li><li>◆ Branches of Applied Microbiology</li><li>◆ Distribution of Microorganisms and their Associations with Humans</li></ul>
3	Classification of Microbes <ul style="list-style-type: none"><li>◆ (Eukaryotes) Eucarya</li><li>◆ Archaea</li><li>◆ Taxonomy and Classification of Prokaryotes</li><li>◆ Bacteria (Eubacteria, or Typical Bacteria)</li><li>◆ Organizing Data on a Tree</li><li>◆ Major Groups of Prokaryotes</li></ul>
4	Microbial Cell Structure <ul style="list-style-type: none"><li>◆ The Importance of Structure to Understanding Microbes</li><li>◆ Microscopes</li><li>◆ Prokaryotic Cell - Structure &amp; Function</li><li>◆ Eukaryotic Cell - Structure &amp; Function</li></ul>
5	Nutrition and Growth of Bacteria <ul style="list-style-type: none"><li>◆ Nutritional Requirements</li><li>◆ Carbon and Energy Sources for Bacterial Growth</li><li>◆ Nutrient Uptake</li><li>◆ Culture Media for the Growth of Bacteria</li><li>◆ Enumeration</li><li>◆ The Growth Curve</li><li>◆ Physical and Environmental Requirements for Microbial Growth</li><li>◆ Measurement of Growth</li><li>◆ The Control of Microbial Growth</li></ul>
6	Bacterial Genetics <ul style="list-style-type: none"><li>◆ Nucleic Acid Structure</li><li>◆ Bacterial Multiplication</li><li>◆ Bacterial Recombination</li><li>◆ Transposable Elements</li><li>◆ Transformation and Transduction</li><li>◆ Plasmids</li></ul>