



College of Pharmaceutical  
Sciences and Drug Manufacturing  
A college accredited by "NAQAAE"



## PMC 504

### **COURSE DESCRIPTION:-**

Introduction to Biotechnology, Introduction to biotechnological resources and techniques, Improvement of product quality and quantity by manipulating the process, Fermentation processes, Uses of computers in fermentation technology and the scheme of the fermentation process, Categories of products: Biomass, The use of microorganisms in food, Microbial enzymes, Extracellular polysaccharides e.g. dextran and xanthan, Production of metabolites, Biotransformation product, Bioremediation e.g. degradation of xenobiotics, Energy and biotechnology, Microorganisms and recovery of metals, Immunological products, Genetic engineering and biotechnology (Impact of genetics on fermentation technology and Potential of genetic engineering). Molecular biotechnology, Gene therapy, Gene transfer methods, Biotech products: cellular sources, release, storage, stability, therapeutic indications, and adverse effects. Dispensing biotech pharmaceuticals (Storage, Handling, Preparation, and Administration).