University of Technology

Serving Education Since 1976

Syllabus

Course Outcomes

Of

Department of Botany

Department of Botany

Course Code	Name of the Course	Course Outcomes
BCBZ 108	Cell Biology,Genetics & Plant Breeding	Discuss key experiments demonstrating DNA as the genetic material, understand the concept of genes, and describe prokaryotic and eukaryotic gene structures, including operons, exons, and introns.and Understand the objectives and methods of plant breeding, and the role of mutations and polyploidy in plant breeding
BCBZ 109	Microbiology, Mycology and Plant Pathology	Describe the general characteristics, structure and morphology of eubacteria, mycoplasma, viruses, and fungi, including their modes of reproduction and economic and biological importance,and Identify and differentiate between biotic and abiotic plant diseases caused by fungi, bacteria, viruses, and MLOs
BCBZ 110	Algae, Lichens and Bryophytes	Analyze and compare the type studies of major bryophyte classes, including Hepaticopsida, Anthocerotopsida, and Bryopsida, focusing on their structure, reproduction, and ecological significance.and Enumerate the general Characters, origin, and evolution of Bryophytes
BCBZ 208	Molecular Biology and Biotechnology	Describe the biological, chemical, and physical nature of hereditary material, including the structure of DNA and RNA, and explain the Watson and Crick model of DNA and the nucleosome model.and Outline the process of DNA replication, including the Meselson-Stahl experiment, and provide a preliminary account of DNA damage and repair mechanisms
BCBZ 209	Plant Physiology And Biochemistry	Describe the structure, function, and classification of Carbohydrates, Proteins, and Lipids, as well as the characteristics and functions of enzymes, including their regulation and role in metabolic processes and Identify essential micro and macro nutrients and their uptake mechanisms

BCBZ 210	**Pteridophytes, Gymnosperms & Palaeobotany**	**Describe the general characteristics, classification, distribution and alternation of generations in Pteridophytes as well as their economic importance and Describe the morphology, anatomy, and reproduction of key pteridophytes, including Psilotum, Selaginella, Equisetum, and Marsilea, highlighting their unique features and roles in their respective environments**
BCBZ 308	**Plant Morphology and Anatomy**	**Study the basic body plan of flowering plants and compare and contrast diversity of plant forms.Elaborate the tissue, tissue system, and shoot apical meristem in detail.Compare the morphology and anatomy of Monocotyledonous and Dicotyledonous seeds, and evaluate the seed dispersal strategies**
BCBZ 309	**Ecology & Economic Botany**	**Identify and describe morphological, anatomical, and physiological adaptations of plants to various environmental factors, including water availability, light, temperature, and soil conditions. Study about the plant succession & ecosystem and describe in detail the vegetation of India**
BCBZ 310	**Angiosperm - Taxonomy and Embryology**	**Explain the principles of taxonomy and the concepts of genus and species.Identify and describe the economic importance of key plant families, including Ranunculaceae, Brassicaceae, Papaveraceae, Malvaceae, Fabaceae etc. and their distinctive features and applications**