

Course Outcomes

S.No	Name of the course	Course Outcome
1.	Microbial Diversity of Lower plants	<p>Course Objectives: This course aims to increase the understanding of the students about the diversity of primitive plant groups such as Archaeobacteria, Algae, Fungi, Bryophytes & Pteridophytes their classification, structure and growth and life cycles.</p> <p>Course Learning Outcomes: The students will develop understanding about the diversity, identification, classification and economic importance of lower plant groups especially Archaeobacteria, Algae, Fungi & Lichens.</p>
2.	Gymnosperms, Taxonomy of Angiosperms and Ecology	<p>Course Objective:- The course focuses on morphology, anatomy, reproduction and classification of Gymnosperms and Understand the significance of fossils and its importance. Basic idea on Angiosperms classification and concept of ecology.</p> <p>Course Learning Outcomes:- The students develop the basic understanding of important characteristics of Gymnosperms, Different classifications systems of Angiosperms along with its merits & demerits. Students will acquire the knowledge on vegetative and reproductive characteristics of Monocot, Dicot families. Students will be able to understand the functioning of basic ecological systems and also acquires knowledge on succession.</p>
3.	Anatomy, Embryology & Palynology	<p>Course Objectives: This course aims to add to understanding of the students about the Anatomy, Embryology and Palynology of plants,</p> <p>Course Learning Outcomes: The students will</p> <ol style="list-style-type: none"> 1. Understand the scope & importance of Anatomy Embryology and Palynology. 2. Know various tissue systems and understand the normal and anomalous secondary growth in plants and their causes. 3. Understand structure and development in microsporangium and megasporangium and process of microsporogenesis and megasporogenesis and male and female gametophytes. 4. Know Pollination, fertilization, endosperm and embryogeny
4.	Cell biology, Genetics and Plant Physiology	<p>Course Objectives: This course aims to educate student about the mechanism and physiology life processes & the entire structure & function of basic unit of life i.e. cell in plants. It focuses on the plant nutrient uptake and translocation, photosynthesis, respiration and nitrogen metabolism & on cell division, mutations & polyploidy</p> <p>Course Learning Outcomes:</p> <ol style="list-style-type: none"> 1. Students will be able to understand the various physiological life processes in plants 2. They will also gain about the various uptake and transport mechanisms in plants and are able to coordinate the various processes. 3. They understand the role of various hormones and enzyme kinetics. 4. Students will be able to understand the detailed structure of cell, cell organelle. 5. Know ultra structure of chromosome & complete process of cell division 6. Will understand the reasons for variations among living organisms.

5.	Biodiversity & Conservation	<p>Course Objectives: This course aims to introduce the concepts of biodiversity, different levels, agrobiodiversity and conservation, sustainable development, population, community and application of these concepts to solve environmental problems and sustainable utilization.</p> <p>Course Learning Outcomes: The students will understand the concept of biodiversity, various levels, wild crops, cultivated crops, agro biodiversity and various methods for the conservation of biodiversity, forest fires and weeds impact. - Students will gain knowledge about important approaches and practices in biodiversity conservation and management.</p>
6.	Tissue Culture & Biotechnology	<p>Course Objective:- The course aims to introduce the concept, scope, instrumentation, basic requirements and applied aspects of plant tissue culture. It focuses on various types plants cultures and concepts and methods associated with development and analysis of transgenic plants, and their applications in basic and applied research.</p> <p>Course Learning Outcome:-</p> <ol style="list-style-type: none"> 1. Student will understand the basic properties of plant cell and with apply their basic knowledge of PTC in various fields for conservation, medicine, product development etc. 2. The student will learn about <ol style="list-style-type: none"> a. Concepts, tools and techniques related to in vitro propagation of plants. b. Different methods used for genetic transformation of plants, use of <i>Agrobacterium</i> as a vector for plant transformation, components of a binary vector system. c. Various case studies related to basic and applied research in plant sciences using transgenic technology.