UNIVERSITY OF KERALA

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College Basket

May 18, 2024, 5:31 a.m.

College : **V T M N S S College (145)**
Year of admission : **Batch 2024**
Discipline : **FYUGP Botany**

Category	Course Code	Course Name	Entered by	Entered on	Description
Semester: 1					
DSC	UK1DSCBOT101	Plant World I (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	The course gives an all-round awareness of plants, their evolution, and how they respond to the environment. Kick-starting the process of scientific inquiry in students by observation of nature and recording its diversity along with problem solving and reporting of scientific data using digital tools and techniques is also envisaged.
DSC	UK1DSCBOT103	Fundamentals and Scope of Botany	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:12:17 GMT	Students can study plants and their biology, including how they grow and adapt to their environment. The history of Botany and also different branches within botany focus on specific areas of plant biology.

DSC	UK1DSCBOT104	Plants in Daily Life	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:12:17 GMT	The course 'Plants in Daily Life' explores the diverse roles plants play in our everyday lives, such as nutrition, medicine, industry, and culture. Students learn about the botanical characteristics, innovative uses, and practical applications of various plant species. The course emphasizes the importance of sustainable practices and the conservation of plant resources for future generations.
MDC	UK1MDCBOT102	Floriculture	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:03:16 GMT	Through this MDC, students will acquire knowledge about floriculture as it is a growing business venture. The course may motivate the students to get into gardening and landscaping startups.
Semester: 2					
DSC	UK2DSCBOT101	Plant World II (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	The purpose of this course is to demonstrate that Plant Science students will have met all learning outcomes in the major course, prior to passing to the next semester by observing, critically evaluating and documenting relevant in-class and co-curricular activities. Preparatory work will include observing and learning from a diversity of activities, including theoretical sessions, field observations and laboratory sessions. Career pathways and higher research

					options will be introduced enabling
DSC	UK2DSCBOT102	Anatomy of Flowering Plants	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:12:42 GMT	The course provides a foundational understanding of plant structure, from the cellular level to the organizational complexity of tissues and organs, also provide students with a comprehensive understanding about the wood formation.
DSC	UK2DSCBOT103	Reproductive Botany and Microtechnique	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:12:42 GMT	Reproductive Botany covers the study of plant reproduction, pollination, fertilization and seed development. Microtechnique involves microscopic methods for studying plant structures and processes. The course typically includes practical lab work, microscopy techniques and theoretical understanding of reproductive processes in plants.
MDC	UK2MDCBOT102	Ecotourism	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:04:16 GMT	The students will understand the basic concepts of ecological balance of life and non-living environment on earth and factors that deteriorate this balance and the requirement of sustainable activities in every sphere of life. Students will appreciate the importance of ecotourism as the potential area for making awareness among masses which indirectly help in conserving nature. Building up from these basic aspects of

					ecotourism, the students may be able to work in ecotourism projects, or can bec
Semester: 3					
DSC	UK3DSCBOT201	Histology and Reproductive Botany (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	This course provides basic knowledge of plant internal architecture, cellular composition, and reproduction. This will also help them to understand how different plant tissue evolve and modify their structure and functions with respect to their environment.
DSC	UK3DSCBOT202	Floral Morphology, Systematic Botany and Ethnobotany	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:13:16 GMT	The course covers the external features of flowering plants and their systematic arrangement based on their similarities and evolutionary relationships and the economic importance of plant resources utilized for daily life.
DSC	UK3DSCBOT204	Environmental Sciences	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:13:16 GMT	This course equips the students to identify Natural resources and key features of ecosystems and understand the interrelationships between organisms within an ecosystem . Explains sustainable development of nature through biodiversity conservation. This course equips the students with knowledge about pollution,its causes and methods for prevention and control.
DSE	UK3DSEBOT202	Forestry	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:19:17 GMT	The course provides an overview of forestry, such as forest ecology, management practices, conservation, sustainable development and

					agroforestry. The students will gain an understanding of the principles and practices of forestry and their role in environmental conservation and resource management
VAC	UK3VACBOT202	Bioethics & IPR	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:06:39 GMT	Students will be able to understand the concepts related to bioethics, biopiracy and IPR and analyse the current norms relating to bioethics in the context of patenting
Semester: 4					
DSC	UK4DSCBOT201	Lower Cryptogams, Phytopathology and Microbiology (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	To familiarize the students with lower cryptogams, microbes , their diversity, structure, life cycle , economic and ecological significance .Students will get an idea about plant diseases and their management.
DSC	UK4DSCBOT202	Archegoniates and Paleobotany (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	To familiarize students the characteristic features and evolutionary significance of Bryophytes, Pteridophytes and Gymnosperms.To generate awareness about lifecycle of Bryophytes, Pteridophytes and Gymnosperms.
DSE	UK4DSEBOT201	Herbal Technology	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:19:47 GMT	This course gives the student the knowledge of basic understanding of herbal drug industry, the quality of raw material, guidelines for quality of herbal drugs, herbal cosmetics, natural sweeteners, nutraceutical etc.

INT	UK4INTBOT201	Summer Internship	Dr. SUSHAMA RAJ R.V.	Wed, 15 May 2024 07:46:12 GMT	
SEC	UK4SECBOT203	Basics of Plant Tissue culture	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:09:12 GMT	The SEC will make the student capable to become an entrepreneur. It deals with basic aspects and opportunities of plant tissue culture.
VAC	UK4VACBOT201	Entrepreneurship in Plant Science	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:08:47 GMT	This course aims to provide students with a comprehensive understanding of plant biology alongside the development of entrepreneurial skills necessary for creating, managing, and sustaining ventures in the botanical industry. Students will be equipped to identify opportunities, innovate, and establish successful businesses in various sectors related to plants, agriculture, and environmental conservation.
VAC	UK4VACBOT203	Phyto-nutraceuticals	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:08:47 GMT	Course is designed to address the rapidly growing field of nutraceuticals, covering a wide range of topics including their types, mechanisms of action, manufacturing processes, product development, clinical testing, and considerations regarding toxicity. The course will provide insight into additives crucial for enhancing shelf life, aiding processing, and improving sensory appeal within the processed food industry.
Semester: 5					

DSC	UK5DSCBOT301	Angiosperm Morphology and Plant Systematics (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	The course "Morphology and Plant Systematics" covers the basics of plant structure and classification. It begins with an introduction to flowering plants and then examines the morphology of roots, stems, leaves, flowers, fruits, and seeds. Students will study and analyse how shape follows function, and how they help plants reproduce. The taxonomy section explains plant categorization, including the kingdom-to-species hierarchy. With herbarium and outdoor sessions, students will learn how to iden
DSC	UK5DSCBOT302	Plant Genetics (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	Course offers a comprehensive knowledge about the characters and its inheritance. The students gain the knowledge of history of genetics and its advancements.
DSC	UK5DSCBOT303	Cell biology and Evolutionary Biology (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	This course gives the basic idea of cell and its ultra structure which help to establish the relationship between structure and function of the different cell organelles/compartments. Topics under cell division, differentiation and death explains how growth and reproduction is regulated at cellular level. Cellular communication gives an idea about how cells communicate to function as an organism and

					interact with the environment. It also deals with the origin and evolution of life which explains
DSE	UK5DSEBOT301	Analytical Techniques in Plant Science	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:20:24 GMT	This is a course designed to develop various skills in the analytical techniques used in plant science. Student will get basic understanding of the principles and applications and practical knowledge in few of the methods listed. The technical skill intended may be useful for doing the research project prescribed for Semester VI and VII or for developing a research career or as a prerequisite for industry related jobs.
DSE	UK5DSEBOT304	Plant Biotechnology	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:20:24 GMT	This course provides a detailed account of the requirements of a tissue culture lab and covers the major procedures and events in plant tissue culture and recombinant DNA technology with speial ention its scope and application. An outlook on functional genomics and conservation biotechnology was also incorporated.
SEC	UK5SECBOT301	Vegetable Gardening	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:09:46 GMT	Through this SEC, students will acquire knowledge about gardening and different vegetables that can be cultivated through gardening. They will understand the global demand and premium price organic products fetch in

					the market. The course may motivate the students to get into vegetable gardening and its Marketing.
Semester: 6					
DSC	UK6DSCBOT301	Plant Physiology (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	The course in plant physiology explores the physiological mechanisms that underpin plant life processes, including photosynthesis, respiration, nutrient assimilation, hormone action, and stress responses. It delves into the different pathways through a combination of lectures, laboratory experiments, and fieldwork; students gain a deep understanding of how plants convert light energy into chemical energy, manage resources, and respond to biotic and abiotic stresses.
DSC	UK6DSCBOT302	Environmental Science and Conservation Biology (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	Fundamental concepts of ecosystems and ecosystem management are included in this course. Biodiversity management including threats, conservation strategies, legislations and international conventions are analysed in detail. The impact of society on the environment, and the role of humans in mitigating environmental problems are also introduced. Field studies and experiments will equip students to monitor and analyse ecological issues, in

					communities and bring out probable solutions.
DSC	UK6DSCBOT303	Biochemistry and Molecular Biology (Mandatory)	University of Kerala	Thu, 02 May 2024 12:02:38 GMT	The course is designed to provide students with a comprehensive understanding of the fundamental molecules that make up living organisms and the molecular mechanisms that govern cellular processes. The students will explore key concepts in molecular biology, such as DNA replication, transcription, translation, and gene regulation.
DSE	UK6DSEBOT302	Phytochemistry and Drug Discovery	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:20:55 GMT	The discipline Provides information on different pathways of primary and secondary metabolism in plants and naturally occurring secondary metabolites such as Alkaloids, terpenoids, phenolics, flavonoids, and tannins, that are important in medicinal plants. The chemical structures, natural distribution, biological function, and therapeutic activities of these compounds are used in the pharmaceutical industry for drug discovery and standardization
DSE	UK6DSEBOT303	Modern Trends in Plant Systematics	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:20:55 GMT	The course provides a clear out look to students regarding the new approaches in taxonomy and its applications.
SEC	UK6SECBOT301	Herbal Cosmetics	DR. ANANDAKUMAR V M	Sun, 12 May 2024 14:10:27 GMT	India is considered as the mother of Ayurverda and herbal products. This SEC empower students to gain

					knowledge about herbal products and ayurveda as demand of such products increases day by day in global market. Through this course students can learn different formulations and methods for the manufacture of herbal products. In future they can start their own earning using this knowledge.
Semester: 7					
DSC	UK7DSCBOT301	Genetic Engineering	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:06 GMT	This course introduces students to foundational concepts in molecular genetics and genetic engineering. Students trace the historical journey of molecular biology and explore the structure and composition of DNA. They delve into gene structure, replication, and transcription mechanisms, advancing to gene regulation in prokaryotes and eukaryotes. The course delivers an understanding of biotechnological applications, ethical considerations, and entrepreneurship opportunities in the field.
DSC	UK7DSCBOT303	Hereditary Science	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:06 GMT	Hereditary Science is a comprehensive study of the principles, mechanisms, and applications of genetics beyond the introductory level. The course delves into advanced topics in cytogenetics, population genetics, developmental genetics,

					biochemical & quantitative genetics and microbial genetics. Emphasis is placed on understanding the intricate mechanisms underlying genetic phenomena and exploring the practical applications of genetic knowledge in various fields.
DSC	UK7DSCBOT304	Biodiversity and Conservation	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:06 GMT	The course enables the students to understand the significance of biodiversity conservation in the current scenario and to analyse the threats in the depletion of biodiversity. It provides the skill to evaluate the measures for conserving the biodiversity for ecosystem balance. Also it allows to understand the concepts and acquire the skills in using geospatial techniques like remote sensing and GIS in the assessment of biodiversity to interpret the biodiversity status of a region.
DSC	UK7DSCBOT401	Methodology in Biological Research	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:06 GMT	Methodology in Biological research is a comprehensive course designed to provide students with the necessary skills and knowledge to conduct scientific research in the fields of biology and related disciplines. The course covers essential topics in research design, data collection, statistical analysis, and interpretation of research findings. Emphasis is placed

					on understanding the principles of experimental design, data analysis techniques, and the application of biostatistics in biological re
DSC	UK7DSCBOT402	Plant Interaction and Defense Mechanism	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:06 GMT	The course provides a understanding of different levels of plant interactions and defence mechanism seen in plants. Students will learn effectiveness of plant defense strategies and developing critical thinking skills to evaluate the significance of plant defense mechanism in agriculture, ecology etc
DSE	UK7DSEBOT403	Aquatic Botany	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:21:25 GMT	The course provides a understanding various aspects of aquatic life. Through this course, students able to learn different types of aquatic ecosystems and the physiological adaptations of aquatic plants to their environment, as well as their ecological roles in aquatic ecosystems, including nutrient cycling, habitat provision, and interactions with other organisms.
Semester: 8					
CIP	UK8CIPBOT401	Capstone Internship Project	Dr. SUSHAMA RAJ R.V.	Wed, 15 May 2024 02:18:41 GMT	
DSC	UK8DSCBOT401	Applied Aspects of Thallophytes	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:33 GMT	The course enables the students to understand the recent classification and phylogeny of thallophytes and thus interpret the significance of thallophytes

					in the evolution of higher plant groups. They will be able to evaluate the ecological role and economically important products obtained from thallophytes and their uses. Also, they can apply their views and conclusions on latest research in potential thallophytes.
DSC	UK8DSCBOT402	Applied Aspects of Archegoniates	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:33 GMT	The course enables the students to understand the recent classification and phylogeny of archegoniates and interpret their significance of in the evolution of higher plant groups. They will be able to evaluate the ecological role and economically important products obtained and their uses. Also, they can apply their views and conclusions on a latest research in potential archegoniates.
DSC	UK8DSCBOT403	Bioinformatics	Dr. SUSHAMA RAJ R.V.	Sun, 12 May 2024 14:18:33 GMT	Basics of Bioinformatics provides students with a solid foundation in bioinformatics principles and techniques, preparing them for further studies or careers in fields such as computational biology, biotechnology, and biomedical research. Through a combination of theoretical learning and hands-on practice, students develop the skills necessary to tackle complex biological problems using computational approaches.

RPH	UK8RPHBOT401	Research project	Dr. SUSHAMA RAJ R.V.	Wed, 15 May 2024 07:45:35 GMT	