



SREE VIDYADHIRAJA N.S.S. COLLEGE

Theerdhpadapuram P O., Vazhoor, Kottayam Dist., Kerala - PIN 686505

www.svrnsscollege.com, Email: info@svrnsscollege.com

0481 2950252 (Office), 0481 2950082 (Principal)

Affiliated to Mahatma Gandhi University, Kottayam - NAAC Accredited with B Grade

Name of the Programme : B Sc Botany

2009-16 Admissions

Course Code	Course Title	Course Outcomes	
Core Courses			
SEMESTER 1			
BO1B01U	Methodology and Perspectives of Science & An Introduction to the World of Plant Diversity	CO1	To helps the students in developing basic skills to study Botany in detail.
		CO2	To understand the universal nature of science.
		CO3	To develop a basic taste in research and want to take it up as a career in future.
		CO4	To get an insight into the different types of classifications in the living kingdom.
SEMESTER 2			
BO2B02U	General Informatics and Methodologies in Plant Sciences	CO1	Understand the current developments in the field of Botany.
		CO2	Equip the students to use programs in computational biology.
		CO3	Introduce the vast repositories of Biological data knowledge.
		CO4	To equip the students to access and analyze data available in databases.
SEMESTER 3			
BO3B03U	Anatomy and reproductive botany of angiosperms	CO1	To study the internal structure of evolved group of plants.
		CO2	To understand the structure of individual cells and tissues.
		CO3	To understand the morphology and development of reproductive parts.
		CO4	To get an insight into the fruit and seed development.
SEMESTER 4			
BO4B04U	Microbiology and Phycology	CO1	To understand the world of microbes and algae.
		CO2	To study the pathological importance of microorganisms.
		CO3	Realize the practical application of Phycology.
		CO4	To study the evolutionary importance of Algae as progenitors of land plants.

SEMESTER 5

BO5B05U	Mycology, Lichenology & Plant pathology	CO1	To understand the world of fungi , lichen and pathogens.
		CO2	To learn the various adaptive strategies of fungi, lichen and pathogens
		CO3	To study the pathological importance of microorganisms.
		CO4	To study the economic importance of these groups.
BO5B06U	Bryology, Pteridology, Gymnosperms & Palaeobotany	CO1	To understand different plant groups and their ecological and economic significance.
		CO2	To enhance the botanical knowledge on lower plant groups.
		CO3	To study the anatomical variations in vascular plants
		CO4	To understand the significance of paleobotany and its applications.
BO5B07U	Angiosperm Morphology, systematic Botany & Economic Botany	CO1	To understand the aims, objectives and significance of Taxonomy.
		CO2	To identify the common species of plants growing in Kerala.
		CO3	To understand the basic techniques in the preparation of herbarium.
		CO4	Familiarize the plants having immense economic importance.
BO5B08U	Cell, Molecular Biology and Evolution	CO1	To understand the ultrastructure and functioning of cells.
		CO2	Familiarization of life processes.
		CO3	To understand the basic and scientific aspects of diversity.
		CO4	To understand DNA as the basis of heredity and variation.

SEMESTER 6

BO6B09U	Plant Physiology & Biochemistry	CO1	To acquire the basic knowledge of plant functioning.
		CO2	To understand the basic skills and techniques related to plant physiology.
		CO3	To understand the role of biomolecules in plant life.
		CO4	To understand structure and importance of biomolecules associated with plant life.
BO6B10U	Environmental studies & Ecotourism	CO1	To understand the significance of environmental science.
		CO2	To make the students aware about the extent of the total biodiversity.
		CO3	To enable the students to understand the structure and function of ecosystem.
		CO4	To introduce the general terms and concepts related to ecotourism.

BO6B11U	Genetics, Plant Breeding & Horticulture	CO1	To understand the principles of heredity.
		CO2	To understand the patterns of inheritance in different organisms.
		CO3	Understand the methods of crop improvement.
		CO4	To develop skills in gardening techniques in students.
BO6B12U	Biotechnology & Bioinformatics	CO1	Understand the current developments in the field of Biotechnology.
		CO2	Equip the students to carry out plant tissue culture.
		CO3	To introduce the vast repositories of Biological data.
		CO4	To equip the students to access and analyze data available in databases.
BO6B13U	Plant Genetics Resources Management	CO1	Helps to understand the conservation of plant genetic resource and its development, socio-economic and political concerns of resource development.
		CO2	To know about green revolution and success in conserving threatened species.
		CO3	Helps students to understand the various economically important crops and its mass scale cultivation.
		CO4	To enlighten about gene banks, conserving biodiversity, sustainable development and PGR management approaches.

Complementary Courses - Zoology

SEMESTER 1

ZY1C01U	Animal Diversity Non-Chordata	CO1	To acquire knowledge on the taxonomic status of various Invertebrate animals and animal groups.
		CO2	To make the student aware of the economic importance of some Non chordates
		CO3	To learn the unity of life with rich diversity of organisms and evolutionary significance of certain invertebrate fauna
		CO4	To develop an aptitude for understanding nature and its rich bio-diversity.

SEMESTER 2

ZY2C02U	Animal Diversity Chordata	CO1	To acquire knowledge on the taxonomic status of the various vertebrate animals and animal groups.
		CO2	To learn the unity of life with rich diversity of organism and evolutionary significance of certain Chordate fauna. .
		CO3	To learn the physiological and anatomical peculiarities of Some vertebrate species through type study.
		CO4	To familiarize the students with the diverse groups of organisms around us.

SEMESTER 3			
ZY3C03U	Human Physiology and Immunology	CO1	To inspire the students in learning the frontier areas of biological sciences
		CO2	To appreciate the correlation between morphology and function of organisms
		CO3	To understand how efficiently our immune system work in our body .
		CO4	To make the student aware of the health related problems, their origin and treatment.
SEMESTER 4			
ZY4C04U	Applied Zoology	CO1	To give the students the necessary basic information about Fishery, Aquaculture, Sericulture, Vermiculture and Apiculture.
		CO2	To understand the technology for utilising eco-friendly organisms around them for beneficial purpose.
		CO3	To equip the students for self-employment opportunities with scientific knowledge to perform profitably and confidently.
		CO4	Students able to understand about prawn culture, mollusk culture.
Open Course			
Course Code	Course Title	Course Outcomes	
SEMESTER 5			
BO5D01U	Ecotourism	CO1	To understand the importance and sustainable approaches in establishing ecotourism
		CO2	To familiarize the employment and financial opportunities for native people
		CO3	To familiarize with the local, national and international ecotourism destinations
		CO4	To familiarize with the various ecotourism related terms, products and facilities
Name of the Programme : BSc Botany			
2017 Admission Onwards			
Core Courses			
SEMESTER 1			
BO1CRT01	Methodology of Science and an Introduction to Botany	CO1	To helps the students in developing basic skills to study Botany in detail.
		CO2	To understand the universal nature of science.
		CO3	To develop a basic taste in research and want to take it up as a career in future.
		CO4	To get an insight into the different types of classifications in the living kingdom.
SEMESTER 2			
BO2CRT02	Microbiology, Mycology and Plant	CO1	To introduce the world of microbes, fungi and lichens.
		CO2	To get familiarize with different life forms in the nearby localities.

BO2CRT02	Mycology and Plant Pathology	CO3	Get to know about various plant diseases and how to tackle it.
		CO4	The economic and pathological importance of microorganisms will be discussed in this course
SEMESTER 3			
BO3CRT03	Phycology and Bryology	CO1	To get familiarize with the unique and general characters of Algae and Bryophytes.
		CO2	Get to know about the ecological and economic importance of Algae and Bryophytes.
		CO3	To study external morphology, internal structure and reproduction of different types of Algae and Bryophytes.
		CO4	Realize the practical application of Phycology.
		CO5	The evolutionary importance of Algae as progenitors of land plants.
SEMESTER 4			
BO4CRT04	Pteridology, Gymnosperms and Paleobotany	CO 1	Familiarize with the diversity in habits, habitats and organization of pteridophytes and gymnosperms.
		CO2	To know about the evolutionary trends and anatomical variations in Pteridophytes and Gymnosperms.
		CO3	To know about The significance of Paleobotany and its applications.
SEMESTER 5			
BO5CRT05	Anatomy, Reproductive Botany, Microtechnique	CO1	To help the students in better understanding of plant anatomy, internal structure of plants and its morphology.
		CO2	To get acquaintance with reproductive botany that explains the gametophytic development, pollination, development of fruits, seeds and seed dispersal.
		CO3	Students are equipped to understand the principles of plant specimen preparation and preservation, and various staining techniques.
BO5CRT06	Research Methodology, Biophysics and Biostatistics	CO1	The course helps the students to develop problem solving skills and motivate them to carry out innovative research projects.
		CO2	The students are familiarized with variable sources of research papers from which, they can easily collect literature review for their projects.
		CO3	The course also assists the students to develop various presentation skills.
		CO4	Students are molded to understand the working and principles of different types of microscopes and basic instruments used in laboratory.
		CO1	To acquire a better understanding of all the physiological processes in plants.

BO5CRT07	Plant physiology and biochemistry	CO2	To understand the basic skills and techniques related to plant physiology.
		CO3	To comprehend the structure function of various biomolecules in plant life.
		CO4	To understand the basic techniques of biochemistry and study of biological process at cellular and molecular level.
BO5CRT08	Environmental science and Human rights	CO1	To understand the significance of environmental science.
		CO2	To enable the students to understand the structure and function of various ecosystem.
		CO3	To make the students aware about the extent of the total biodiversity.
		CO4	To know more about Human rights and environmental laws.
SEMESTER 6			
BO6CRT09	Genetics, Plant Breeding and Horticulture	CO1	To understand the principles of heredity and patterns of inheritance in different organisms.
		CO2	To understand the concept of population genetics.
		CO3	Understand the methods of crop improvement.
		CO4	To develop skills in gardening techniques in students.
BO6CRT10	Cell and molecular biology	CO1	To understand the function and ultrastructure of cell and organelles.
		CO2	To understand DNA as the basis of heredity and variation.
		CO3	To familiarize with various diseases associated with chromosomal aberrations.
		CO4	To understand the cytological aspects of growth and development.
BO6CRT11	Angiosperm .morphology, Taxonomy and Economic Botany	CO1	To acquaint with the aims, objectives and significance of taxonomy.
		CO2	To understand the basic techniques in the preparation of herbarium.
		CO3	To familiarize the plants having immense economic importance.
		CO4	To familiarize the diversity of angiosperms in their locality.
BO6CRT12	Biotechnology and Bioinformatics	CO1	To understand the applications of plant tissue culture, genetic engineering and bioinformatics.
		CO2	To equip the students to carry out plant tissue culture.
		CO3	The students are enabled to inquire into the intricacies of genomics.
		CO4	To understand the vast repositories of biological data knowledge.

BO6PET02	Plant Genetic Resource Management	CO1	Helps to understand the conservation of plant genetic resource and its development, socio-economic and political concerns of resource development.
		CO2	To know about green revolution and success in conserving threatened species.
		CO3	Helps students to understand the various economically important crops and its mass scale cultivation.
		CO4	To enlighten about gene banks, conserving biodiversity, sustainable development and PGR management approaches.

Complementary Courses - Zoology

SEMESTER 1

ZY1C01U	Animal Diversity Non-Chordata	CO1	To acquire knowledge on the taxonomic status of various Invertebrate animals and animal groups.
		CO2	To make the student aware of the economic importance of some Non chordates
		CO3	To learn the unity of life with rich diversity of organisms and evolutionary significance of certain invertebrate fauna
		CO4	To develop an aptitude for understanding nature and its rich bio-diversity.

SEMESTER 2

ZY2C02U	Animal Diversity Chordata	CO1	To acquire knowledge on the taxonomic status of the various vertebrate animals and animal groups.
		CO2	To learn the unity of life with rich diversity of organism and evolutionary significance of certain Chordate fauna. .
		CO3	To learn the physiological and anatomical peculiarities of
		CO4	To familiarize the students with the diverse groups of organisms around us.

SEMESTER 3

ZY3C03U	Human Physiology and Immunology	CO1	To inspire the students in learning the frontier areas of biological sciences
		CO2	To appreciate the correlation between morphology and function of organisms
		CO3	To understand how efficiently our immune system work in our body .
		CO4	To make the student aware of the health related problems, their origin and treatment.

SEMESTER 4

		CO1	To give the students the necessary basic information about Fishery, Aquaculture, Sericulture, Vermiculture and Apiculture
--	--	-----	---

ZY4C04U	Applied Zoology	CO2	To understand the technology for utilising eco-friendly organisms around them for beneficial purpose.
		CO3	To equip the students for self employment opportunities with scientific knowledge to perform profitably and confidently.
		CO4	Students able to understand about prawn culture, mollusk culture.

Open Course

SEMESTER 5

BO5D01U	Ecotourism	CO1	To understand the importance and sustainable approaches in establishing ecotourism.
		CO2	To familiarize the employment and financial opportunities for native people.
		CO3	To familiarize with the local, national and international ecotourism destinations.
		CO4	To familiarize with the various ecotourism related terms, products and facilities.

Choice Based Course

SEMESTER 6

BO6B13U	Plant Genetics Resources Management	CO1	Helps to understand the conservation of plant genetic resource and its development, socio-economic and political concerns of resource development.
		CO2	To know about green revolution and success in conserving threatened species.
		CO3	Helps students to understand the various economically important crops and its mass scale cultivation.
		CO4	To enlighten about gene banks, conserving biodiversity, sustainable development and PGR management approaches.