

## Department of Botany University of Kashmir



## **Programmes Offered**

1.Masters Programme in Botany2.Ph D Programme in Botany

Self-Study Report (SSR) 2019-2023



The revised syllabi for PG programme in Botany as per the Modified Choice Based Credit System (CBCS) Scheme adopted by the University for Implementation at Post-Graduate level from academic session 2018 and onwards is as under:

Core Courses (CR): There are 4 Core Courses per semester, i.e. 16 courses for 4 semesters. The first three core courses in each semester are theory courses comprises of 4 credits each, while the fourth core course in each semester is the practical course based on the practicals of 3 theory courses of the respective semesters with 2 credits each. A student has to take 4 Core courses per semester to obtain 14 credits per semester.

CORE COURSES								
COURSE	COURSE NAME		Н	OURS	CREDITS			
CODE		L	T	P	7			
SEMESTER 1 <sup>ST</sup>								
BOT- 21101CR	Plant Taxonomy	4	0	0	4			
BOT- 21102CR	Microbiology, Fungi and Plant Pathology	4	0	0	4			
BOT- 21103CR	Algae and Bryophyta	4	0	0	4			
BOT-21104CR	Practical-1	0	0	6	2			
SEMESTER 2 <sup>nd</sup>								
BOT- 21201CR	Pteridophyta and Gymnosperms	4	0	0	4			
BOT- 21202CR	Ecology	4	0	0	4			
BOT- 21203CR	Cell and Molecular Biology	4	0	0	4			
BOT- 21204CR	Practical-2	0	0	6	2			
	SEMESTER 3 <sup>rd</sup>							
BOT- 21301CR	Reproductive and Developmental Biology of Angiosperms	4	0	0	4			
BOT- 21302CR	Cytogenetics and Genetics	4	0	0	4			
BOT- 21303CR	Plant Metabolism	4	0	0	4			
BOT- 21304CR	Practical-3	0	0	6	2			
	SEMESTER 4th	I			•			
BOT- 21401CR	Plant Physiology	4	0	0	4			
BOT- 21402CR	Plant Tissue Culture and Genetic Engineering	4	0	0	4			
BOT- 21403CR	Plant Resource Utilization	4	0	0	4			
BOT- 21404CR	Practical-4	0	0	6	2			



**Discipline Centric Electives Courses (DCE):** Each Discipline Centric Electives course shall have 4 credits. A student has to obtain 8 credits per semester from DCE courses.

The Core Courses (CR) and Discipline Centric Electives Courses (DCE) are exclusively meant for the Department's own students.

Discipline Centric Elective Courses(DCE)					
COURSE CODE	COURSE NAME	HOURS			CREDITS
		L	T	P	
BOT-21105-DCE	Biostatistics and Biotechniques	3	0	2	3+1=4
BOT-21106-DCE	Mushroom Cultivation Technology	3	0	2	3+1=4
BOT-21107-DCE	Medicinal Plants and Herbal				
	Resource Management	3	0	2	3+1=4
BOT-21205-DCE	Biodiversity and Conservation	3	0	2	3+1=4
	Biology				
BOT-21206 DCE	Applied Phycology	3	0	2	3+1=4
BOT-21207-DCE	Applied Plant Pathology	3	0	2	3+1=4
BOT-21305-DCE	Applied Ecology	3	0	2	3+1=4
BOT-21306-DCE	Invasion Biology	3	0	2	3+1=4
BOT-21307-DCE	Plant Stress Biology and Molecular	3	0	2	3+1=4
	Genetics				
BOT-21308-DCE	Crop Genetics and Molecular	3	0	2	3+1=4
	Breeding				
BOT-21309-DCE	Applied Crop Pyhsiology	3	0	2	3+1=4
BOT-21310-DCE	Soil Science and Plant Nutrition	3	0	2	3+1=4

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Generic Elective Courses (GE): General Elective Courses shall have two credits. The GE Courses are meant for the students of the sister departments under the school of Biological Sciences.

**Open Elective Courses (OE):** OE courses shall have 2 credits. OE courses are meant for students of all the other departments, except those falling under School of Biological Sciences.

A student shall have to earn 08 credits in the entire programme from the Generic elective /Open elective courses

The course structure and credit breakup has been given in tabulated form as follows. One credit means one hour of teaching/tutorial or two hours of practical work/field work per week, for 16 weeks in a semester equivalent to 90 actual teaching days.

General Electives (GE)						
COURSE CODE	COURSE NAME	HOURS			CREDITS	
		L	T	P		
BOT-21001GE	Principles of Genetics	2	0	0	2	
BOT-21002GE	Urban Ecology	2	0	0	2	
BOT-21003GE	Basics in Plant Biology	2	0	0	2	
BOT-21004GE	Commercial Plant Propagation	2	0	0	2	
BOT-21005GE	Weed Management	2	0	0	2	
BOT-21006GE	Aquatic Ecosystem Management	2	0	0	2	
BOT-21407GE	Techniques in Life Science	2	0	0	2	
BOT-21408GE	Biological Systematics and Biodiversity	2	0	0	2	
BOT-21409GE	Biofertilizers and Organic Farming for Sustainable Agriculture	2	0	0	2	
Open Elective Courses						
BOT-21001OE	Basics of Biodiversity	2	0	0	2	
BOT-21002OE	Commercial Floriculture	2	0	0	2	
BOT-21003OE	Bioenergy	2	0	0	2	

## **Abbreviations:**

L -LECTURE T -TUTORIAL

P -PRACTICAL WORK

**CR** -**CORE COURSE** 

DCE -DISCIPLINE CENTRIC ELECTIVE

GE -GENERAL ELECTIVE

**OE -OPEN ELECTIVE** 

Prof. & Head Department of Botany University of Kashmir Srinagar **Examination Scheme:** The examination in 3 Core courses based on theory in each semester shall constitute two components, viz. internal assessment of 20 marks and external examination of 80 marks while the examination in Discipline Centric Electives shall constitute internal assessment of 15 marks, end semester examination of 60 marks and practical examination of 25 marks. The 4<sup>th</sup> core course based on practicals in each semester shall comprise of 50 marks. In case of OE and GE there will be only one examination at the end of semester which shall comprise of 50 marks.

**Project work**: Project work (Bot-Proj.) worth 8 credits is compulsory for the students and will be allotted in 4th semester based on choice of the student and space availability in relation to his/her choice. The project has to be submitted prior to the conduct of 4th semester examination so that it can be evaluated and open viva voce be conducted prior to declaration of the results. The students for project work will be evenly d istributed among faculty members of the Department.

**Botanical Trips**: To make on- field observations and impart on-site training in the subject botany, the Department will ensure that a minimum of one field trip is organized during each semester to acquaint the students with the flora of the region and also to collect, properly preserve, and prepare at least 50 plant specimens following standard herbarium techniques. The students will, however, avoid collection of rare and threatened plant species. The herbarium will have to be submitted at the end of the semester wherein Taxonomy is a core course.

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