

Central University of Dimachal Dradesh (ESTABLISHED UNDER CENTRAL UNIVERSITIES ACT 2009) Dharamshala, Himachal Pradesh-176215



NAAC Criterion-I

Key Indicator –1.2.2

Structure of the program clearly indicating the course as approved by competent Board of studies

1.2.2 Evidences



Department of Plant Science

Central University of Himachal Pradesh, Dharamshala,

Kangra



INDEX **Department of Plant Science**

S. No.	DESCRIPTION	Agenda item	PageNo. 2 3-6	
1	Approved Minutes of the CDC highlighting the courses structure as per CBCS dt 16/08/2017	Item BOT-BOS-1/18-2		
2	Approved Minutes of the 1 st BOS meeting highlighting the CBCS bases course curriculum dt 11/04/2018	BOT-BOS-1/18-1		

विभागाध्यक्ष, पादप विज्ञान विभाग Head, Department of Plant Sciences हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय धर्मशाला Central University of Himachal Pradesh, Dharamshala PO Box: 21, Dharamshala, Himachal Pradesh - 176215



हिमाचल प्रदेश केंद्रीय विश्वविद्यालय Central University of Himachal Pradesh

(पादप विज्ञान विभाग / Department of Plant Science) (जीव विज्ञान स्कूल / School of Life Sciences) शाहपुर परिसर , ज़िला काँगड़ा, हिमाचल प्रदेश -176206



File No: Plant Science/2-3(Head File)/CUHP/21/489

Dated: 27/03/2023

1.2.2 Programmes in which CBCS / Elective course system implemented

M.Sc Plant Science (Botany) Ph.D. Plant Science (Botany)

All programs are based on Choice Based Credit System (CBCS) / elective course system adapted by university and as reflected in the <u>Minutes of Curriculum Development Committee and</u> <u>First Board of Studies Meeting (Attached)</u>

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विभागाध्यदेभ् पादप विज्ञान विभाग Head, Department of Plant Sciences हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय घर्मशाला Central University of Himachal Pradesh, Dharamshala PO Box: 21, Dharamshala, Himachal Pradesh - 176215



Central University of Limachal Pradesh (ESTABLISHED UNDER CENTRAL UNIVERSITIES ACT 2009) PO Box: 21, Dharamshala, Himachal Pradesh-176215

No. Botmay/1-1/CUHA2017

Date: 16.08.2017

A meeting of Course Curriculum Development Committee was held on 16 August 2017 to propose the courses as per CBCS Guidelines for M.Sc. Botany Programme.

The following members were present in the meeting:-

- 1. Prof. H.R. Sharma, Dean, School of Social Science
- 2. Prof. Arvind Bhatt, Deptt. of Biotechnology, Himachal Pradesh University, Shimla
- 3. Dr. Adarsh Pal Vig, Department of Botanical & Environmental Sciences, Guru Nanak Dev University, Amritsar

The Committee suggested the following structure of the courses to be offered in the department of M.Sc. Botany as per new CBCS.

COURSE STRUCTURE (M.Sc. Botany)

Sr. No.	Course Code	Course Name	Credits	Pre-requisite/ Remarks
1	BOT 501	Plant Cell Biology	4	
2	BOT 502	Biodiversity of Viruses, Bacteria and Fungi	4	
3	BOT 503	Phycology	4	
4	BOT 504	Bryophytes and Pteridophytes	4	
5	BOT 505	Genetics and Cytogenetics	4	
6	BOT 506	Gymnosperms	4	
7	BOT 507	Angiosperms	4	
8	BOT 508	Plant Physiology and Metabolism	4	
9	BOT 509	Plant Ecology and Evolution	4	
10	BOT 510	Anatomy and development of Plants	4	

Core Compulsory Courses (40 Credits)

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File No.: Botany/1-5/BOS/CUHP/18/39

Dated: 11,04. 2018

MINUTES OF THE FIRST BOARD OF STUDIES MEETING HELD ON 11TH APRIL, 2018

The meeting of the First Board of Studies of the Department of Botany, School of Life Sciences was held on 11th April, 2018 in Committee Room of Central University of Himachal Pradesh, Temporary Academic Block, Shahpur. Prof. Ambrish Kumar Mahajan, Head, Department of Botany and Dean, School of Life Sciences welcomed all the Hon'ble members.

Following members attended the meeting:

- Prof. Ambrish Kumar Mahajan Head and Convener Head, Department of Botany and Dean, School of Life Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
- Prof. G.A. Shantibala Devi Subject Expert Department of Life Sciences, Manipur University, Manipur.
- Dr. Arvind Bhatt Subject Expert Department of Biotechnology at Himachal Pradesh University, Summer Hill, Shimla.
- Prof. Mushtaq Ahmed Vice Chancellor's Nominee Department of Environmental Sciences, School of Earth and Environmental Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
- Dr. Vikram Singh Vice Chancellor's Nominee Centre for Computational Biology and Bioinformatics, School of Life Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Shahpur.
- Ms. Nivedita Rana Special Invitee Department of Zoology, School of Life Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Dehra.
- Dr. Vivek Sharma Special Invitee Department of Zoology, School of Life Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Dehra.

8. Dr. Shalini Chandel – Special Invitee

Department of Botany, School of Life Sciences, Central University of Himachal Pradesh,

9. Dr. Pawan Kumar Sharm – Special Invitee

Department of Botany, School of Life Sciences, Central University of Himachal Pradesh, Temporary Academic Block, Dehra.

Following Decision were taken in BOS meeting as per the Agenda.

Item BOT-BOS-1/18-1: Approval of Rules of Business for the Board of Studies.

It was unanimously resolved that the draft rules of Business for the Board of Studies presented before the Board of Studies approval as "Rules of Business for the Board of Studies" which would come into effect from this day i.e. Wednesday the 11th April, 2018. (Annexure- I)

Item BOT-BOS-1/18-2: Approval of Courses for PG and RD Program (As per the Ordinance 4 clause 4 b (i).

The BOS approved the minutes of the CDC, Botany held on 16.08.2017 (Placed as ANNEXURE-A) with minor amendment (s) by adding the following three practical courses of 04 credits each, respectively, for 3rd and 4th Semester students of M.Sc. Botany who have already been admitted in the University.

- 1. Practical Course in Botany I (Course code BOT-426) = 04 credits (Core-open)
- 2. Practical Course in Botany II (Course code BOT-524) = 04 credits (Core-open)
- 3. M.Sc Dissertation (Course code BOT-599) (Core-compulsory)

The BOS also resolved that the course, namely, Genetics & Cytogenetics (BOT -505) which has been listed as a core-compulsory course in the CDC minutes be shifted and placed as a Core-open course. The BOS further approved that the course curriculum for M.Sc. Botany, in future shall be as per UGC choice based credit system (CBCS). Accordingly, the BOS recommends for approval to the School Board the course curriculum as placed at ANNEXURE-II (to be approved through email).

Item BOT-BOS-1/18-3: Approval of Supervisors

BOS members recommend taking up this agenda once the Department will have research scholar.

Item BOT-BOS-1/18-4: List of Experts Approved. (Annexure- V)

Head Department of Botany in consultation with the concern faculty members may add any other name to this list depending upon the situation as per need.

Item BOT-BOS-1/18-5: Approval of Student's Industrial Training / Education Tours It was unanimously resolved that Students may go for Industrial Training in different Institutes and Educational Tours.

Item BOT-BOS-1/18-6: Invited Talks/Lectures

animously resolved that Scientists, Professors and Eminent Scholars in the field of Botany should be invited for delivering talks for the benefit of M.Sc. students.

The meeting ended with a vote of thanks to the Chair.

Ms. Nivedita Rana, (Special Invitee)

Dr. Vivek Sharma, (Special Invitee)

Dr. Paven Kumar Sharma

(Special Invitee)

11) 4

Dr. Arvind Bhatt (Subject Expert)

Dr. Vikram Singh (VC's Nominee)

Kanh'Sala Prof. G.A. Shantibala Devi

(Subject Expert)



Dr. Shalini Chandel (Special Invitee)

touchan Prof. Mushtaq Ahmed 1 4 18 (VC's Nominee)

Prof. A.K. Mahajan Chairman & Convener

Semester	Creuits	ar Framework" for M.Sc Botany based on Choice Bas	Credits	Facu Ity	Credits		VElective open	Credits	Facult
		BOT 503 – Phycology	2	1.7			- Secure open		-
		BOT 504 - Bryophytes and Pteridophytes	2		Judin 201		Participation and Control of Cont		+
		BOT 506-Gymnosperms - chayed to BoTSQA BOT 410- Mycology and Plant Pathology	ano th	that		Gunn	Part of the second s	_	
1	16	BOT 410 - Mycology and Plant Pathology	4	-		IMING	2 Jean		
		BOT 514 - Cytogenetics and Molecular Biology	2	-					-
		BOT 412 - Practical Course on Bryophytes, Pteridophytes and Gymnosperms	2	-			Alexandre		
	-	BOT 413 - Practical Course on Phycology, Mycology, Plant Pathology and Biology	2				and the second s		-
		BOT 416 - Embryology of Angiosperms	2			BOT 524 -	Biostatistics	2	-
		BOT 415 - Plant Physiology and Biochemistry	4				Basics of Bioinformatics		-
		BOT 411 - Ecology and Environment	2					2	
11	12	BOT 417 - Practical Course on Embryology of	-	-	4		T 403 - Phytochemistry		
		Angiosperms, Ecology BOT 418 – Practical Course on Plant	2		-	BOT 575 -	1 575 - Cell Biology		
	9	Physiology and Biochemistry	2			BOT 401-	Paleobotany	2	
		POT 40				BOT 572 -	Methods in Field Biology and Analytical Techniques	2	
**	4	BOT 419 - Anatomy and Development of Plants	2		4	BOT 565 -	Applied and Industrial Microbiology	2	
ш		BOT 420 – Practical Course on Anatomy of Plants	2			BOT 519 - Plant Biodiversity and Bioresource Utilization		2	1
	1					BOT 520 - Bio-resources and Biotechnology		2	
						BOT 578- Genomics. Proteomics and Metabolomics BOT 577-Economic Botany and Medicinal Plants		2	
			-			BOT 576-	Genetics	2	+
		BOT 414 - Taxonomy of Angiosperms	2			BOT 407 - Ecological Modelling		2	
IV	8			2		BOT 404- Horticulture and Forestry		2	
IV		BOT 514 – Practical Course on Cytogenetics Molecular Biology, Microbiology	2			BOT 576 -Biosafety, IPR and Patentng		2	-
		BOT 515 - M.Sc dissertation		-		BOT 402 -Ethanobotany		an search	
-			515 - M.Sc dissertation 4			- Seed Biology	2		
Semester	Credits	Elective (Specialization)	-	-		T	and the second sec	2	_
	Citano	BOT 516 - Genetics and Molecular Biology	Credits	_	Semester	Credits	Elective (Specialization)	Credits	Fac
			4		IV	8	BOT 525 -Plant Biotechnology and Genetic Engineering	1	
m	8	BOT 515 - Microbiology and Plant Pathology	4				BOT 564- Plant Protection and	4	-
		BOT 518 - Plant Ecology and Evolution	4	-			Quarantine BOT 527- Flant Biodiversity and	63%	
		BOT 121 - Plant Physiology	4	-			Biosystematics	1	1