

Approved in BOS meeting in the Subject of Botany held on
12 June 2013

Annexure-I of
BOS Meeting

**BIOSCIENCES DEPARTMENT
HIMACHAL PRADESH UNIVERSITY**

OUT LINES OF SYLLABI AND COURSES OF READING
IN THE SUBJECT OF BOTANY FOR B. Sc. WITH MAJOR IN BOTANY AND MINOR
ELECTIVE IN BOTANY (2013-2014 onwards)

(A) Structure Outline of Major in Botany (Minimum Credits to be Earned=56)

Semester	Course Code	Course Type	Course Name	Credit(s)/ week	Cumulated Credits Category- wise
I (Odd)		Compulsory Course I	To be Selected from the list of Compulsory Courses	3	Compulsory – 6 Core – 8 Elective – 8 GI & H – 1 Total – 23
		Compulsory Course II (Skill Based)	To be Selected from the list of Compulsory Courses (Skill Based)	3	
	BSCBOT0101	Major Core Course I	Phycology, Mycology and Plant Pathology	3	
	BSCBOT0102	Major Core Course II	Bryophyta and Pteridophyta	3	
		Minor Elective Course I (a)	To be Selected from the list for Minor Elective Subject other than Botany	3	
		Minor Elective Course I (b)	To be Selected from the list for Minor Elective Subject other than Botany	3	
	BSCBOT0101(P)	Major Core Lab Course I	Phycology, Mycology and Plant Pathology	1	
	BSCBOT0102(P)	Major Core Lab Course II	Bryophyta and Pteridophyta	1	
		Minor Elective Lab Course I (a)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Minor Elective Lab Course I (b)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		GI and H Course I	To be Selected from the list GI and Hobby Courses	1	

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Cumulated Credits Category-wise
II (Even)		Compulsory Course III	To be Selected from the list of Compulsory Courses	3	Compulsory – 6 (12) Core – 8 (16) Elective – 8 (16) GI & H – 1 (2) Total 23 (46)
		Compulsory Course IV(Skill Based)	To be Selected from the list of Compulsory Courses (Skill Based)	3	
	BSCBOT0203	Major Core Course III	Palaeobotany and Gymnosperms	3	
	BSCBOT0204	Major Core Course IV	Plant Taxonomy and Selected Families of Angiosperms	3	
		Minor Elective Course II (a)	To be Selected from the list for Minor Elective Subject other than Botany	3	
		Minor Elective Course II (b)	To be Selected from the list for Minor Elective Subject other than Botany	3	
	BSCBOT0203(P)	Major Core Lab Course III	Palaeobotany and Gymnosperms	1	
	BSCBOT0204(P)	Major Core Lab Course IV	Plant Taxonomy and Selected Families of Angiosperms	1	
		Minor Elective Lab Course II (a)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Minor Elective Lab Course II ()	To be Selected from the list for Minor Elective Subject other than Botany	1	
	GI and H Course II	To be Selected from the list GI and Hobby Courses	1		
III (Odd)		Compulsory Course V	To be Selected from the list of Compulsory Courses	3	Compulsory – 6 (18) (Complete) Core – 8 (24) Elective – 8 (24) GI & H – 1 (3) (Complete) Total 23 (69)
		Compulsory Course VI	To be Selected from the list of Compulsory Courses (Skill Based)	3	
	BSCBOT0305	Major Core Course V	Economic Botany and Plant Anatomy	3	
	BSCBOT0306	Major Core Course VI	Embryology of Angiosperms	3	

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Cumulated Credits Category-wise
		Minor Elective Course III (a)	To be Selected from the list for Minor Elective Subject other than Botany	3	
		Minor Elective Course III(b)	To be Selected from the list for Minor Elective Subject other than Botany	3	
	BSCBOT0305(P)	Major Core Lab Course V	Economic Botany and Plant Anatomy	1	
	BSCBOT0306(P)	Major Core Lab Course VI	Embryology of Angiosperms	1	
		Minor Elective Lab Course III(a)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Minor Elective Lab Course III(b)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		GI and H Course III	To be Selected from the list GI and Hobby Courses	1	
IV (Even)	BSCBOT0407	Major Core Course VII	Cytogenetics	3	Core – 12 (36) Elective – 8 ((32) Core / Elective (additional) - 4 Total 24 (93)
	BSCBOT0408	Major Core Course VIII	Evolutionary Biology	3	
	BSCBOT0409	Major Core Course IX	Cell Biology	3	
		Minor Elective Course IV (a)	To be Selected from the list for Minor Elective Subject other than Botany	4	
		Minor Elective Course IV (b)	To be Selected from the list for Minor Elective Subject other than Botany	4	
	BSCBOT0407(P)	Major Core Lab Course VII	Cytogenetics	1	
	BSCBOT0408(P)	Major Core Lab Course VIII	Evolutionary Biology	1	
	BSCBOT0409(P)	Major Core Lab course IX	Cell Biology	1	
		Minor Elective Lab Course IV (a)	To be Selected from the list for Minor Elective Subject other than Botany	1	

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Cumulated Credits Category-wise
		Minor Elective Lab Course IV(b)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Core / Elective Course (Additional)*		4	
V (Odd)	BSCBOT0510	Major Core Course X	Biochemistry	3	Core – 12 (48) Elective – 8 (40) (Complete) Core / Elective (additional) - 4 Total 24 (117)
	BSCBOT0511	Major Core Course XI	Biotechnology	3	
	BSCBOT0512	Major Core Course XII	Molecular Biology	3	
		Minor Elective Course V(a)	To be Selected from the list for Minor Elective Subject other than Botany	3	
		Minor Elective Course V(b)	To be Selected from the list for Minor Elective Subject other than Botany	3	
	BSCBOT0510(P)	Major Core Lab Course X	Biochemistry	1	
	BSCBOT0511(P)	Major Core Lab Course XI	Biotechnology	1	
	BSCBOT0512(P)	Major Core Lab Course XII *	Molecular Biology	1	
		Minor Elective Lab Course V (a)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Minor Elective Lab Course V (b)	To be Selected from the list for Minor Elective Subject other than Botany	1	
		Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	
VI (Even)	BSCBOT0613	Major Core Course XIII	Ecology	3	Core – 8 (56) Core / Elective (additional) – 20* Total 28 (145)
	BSCBOT0614	Major Core Course XIV	Plant Physiology	3	
	BSCBOT0613(P)	Major Core lab Course XIII	Ecology	1	
	BSCBOT0614(P)	Major Core lab Course XIV	Plant Physiology	1	
	BSC(Or Other than Science) BOT(or other than Botany) 06**	Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Cumulated Credits Category-wise
	BSC(Or Other than Science) BOT(or other than Botany) 06**	Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	
	BSC(Or Other than Science) BOT(or other than Botany) 06**	Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	
	BSC(Or Other than Science) BOT(or other than Botany) 06**	Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	
	BSC(Or Other than Science) BOT(or other than Botany) 06**	Core / Elective Course (Additional)*	Any one of the Additional or open elective courses	4	

***Additional Elective Courses offered by Biosciences Department in Botany (can be chosen for earning credits over and above 56 Major subject credits, 40 Minor elective credits, 9 (Min.) Compulsory course credits and 1 (Min.) 3GI & H Course credits i.e. total 106 credits; for getting B.Sc. Degree a learner has to earn a minimum of 120 credits.)**

Semester	Course Code	Course Type	Course Name	Credit(s)/week	Cumulated Credits Category-wise
VI	BSCBOT0615	Core / Elective Course (Additional)*	Plant Pathology	4	
VI	BSCBOT0616	Core / Elective Course (Additional)*	Microbiology	4	
VI	BSCBOT0617	Core / Elective Course (Additional)*	Techniques in Biological Research	4	
VI	BSCBOT0618	Core / Elective	Utilization of Plants	4	

		Course (Additional)*			
VI	BSCBOT0619	Core / Elective Course (Additional)*	Ethnobotany	4	
VI	BSCBOT0620	Core / Elective Course (Additional)*	Plant Breeding	4	
VI	BSCBOT0621	Core / Elective Course (Additional)*	Biodiversity	4	
VI	BSCBOT0622	Core / Elective Course (Additional)*	Bioinformatics	4	

***Open Elective Courses offered by Botany Department**

Semester	Course Code	Course Type	Course Name	Credit(s)/ week	Cumulated Credits Category- wise
VI	BSCBOT0623	Open /Core Elective Course (Additional)*	Floriculture	4	
VI	BSCBOT0624	Core / Elective Course (Additional)*	Mushroom Cultivation	4	

General Interest Courses Offered by Botany Department

Semester	Course Code	Course Type	Course Name	Credit(s)/ week	Cumulated Credits Category- wise
I/II/III	BSCBOT**25	GI/H	Psychoactive Plants and Society	1	
I/II/III	BSCBOT**26	GI/H	Digital Photography	1	

(B) Structure Outline of Minor Elective in Botany for other than Major Botany Students (Minimum Credits to be Earned=20). Other than Botany Major Learner can do Double major by earning 34 more credits over and above 20 credits of Minor Elective.

Semester	Course Code	Course Name	Course Name	Credit(s)/week	Cumulated Credits Category-wise
I (Odd)		Compulsory Course I		3	Compulsory – 6 Core – 8 Minor Elective 1(a) – 4(4) Minor Elective 1(b)=4 Total Minor Electives – 8 (8) GI & H – 1 Total – 23
		Compulsory Course II (Skill Based)		3	
		Major Core Course I		3	
		Major Core Course II		3	
	BSCBOT0101	Minor Elective Course I (a)	Phycology, Mycology and Plant Pathology	3	
		Minor Elective Course I (b)		1	
		Major Core Lab Course I		1	
		Major Core Lab Course II		1	
	BSCBOT0101(P)	Minor Elective Lab Course I (a)	Phycology, Mycology and Plant Pathology	1	
		Minor Elective Lab Course I (b)		1	
	GI and H Course I		1		
II (Even)		Compulsory Course III		3	Compulsory – 6 (12) Core – 8 (16) Minor Elective II(a) – 4 (8) Minor Elective II(b) – 4 (8) Total Minor Electives – 8 (16) GI & H – 1 (2) Total 23 (46)
		Compulsory Course IV(Skill Based)		3	
		Major Core Course III		3	
		Major Core Course IV		3	
	BSCBOT0203	Minor Elective Course II (a)	Palaeobotany and Gymnosperms	3	
		Minor Elective Course II (b)		3	
		Major Core Lab Course III		1	
		Major Core Lab Course IV		1	
	BSCBOT0203(P)	Minor Elective Lab Course II (a)	Palaeobotany and Gymnosperms	1	
		Minor Elective Lab Course II		1	
	GI and H Course II		1		
III (Odd)		Compulsory Course V		3	Compulsory – 6 (18) (Complete) Core – 8 (24) Minor Elective III(a) – 4 (12)
		Compulsory Course VI		3	
		Major Core Course V		3	
		Major Core Course VI	-----	3	

Semester	Course Code	Course Name	Course Name	Credit(s)/week	Cumulated Credits Category-wise
	BSCBOT0102	Minor Elective Course III (a)	Bryophyta and Pteridophyta	3	Minor Elective III(b) – 4 (12) Elective – 8 (24) GI & H – 1 (3) (Complete) Total 23 (69)
		Minor Elective Course III (b)	-----	3	
		Major Core Lab Course V	-----	1	
		Major Core Lab Course VI	-----	1	
	BSCBOT0102(P)	Minor Elective Lab Course III(a)	Bryophyta and Pteridophyta	1	
		Minor Elective Lab Course III (b)	-----	1	
		GI and H Course III	-----	1	
IV (Even)		Major Core Course VII	-----	4	Core – 12 (36) Minor Elective IV(a) – 4 (16) Minor Elective IV(b) – 4 (16) Total Minor Electives – 8 (32) Core / Elective (additional) - 4 Total 24 (93)
		Major Core Course VIII	-----	4	
		Major Core Course IX	-----	4	
	BSCBOT0204	Minor Elective Course IV (a)	Plant Taxonomy and Selected Families of Angiosperms	4	
		Minor Elective Course IV (b)	-----	4	
		Major Core Lab Course VII	-----	1	
		Major Core Lab Course VIII	-----	1	
	BSCBOT0204(P)	Minor Elective Lab Course IV (a)	Plant Taxonomy and Selected Families of Angiosperms	1	
		Minor Elective Lab Course IV (b)	-----	1	
		Core / Elective Course (Additional)*	-----	4	
V (Odd)		Major Core Course X	-----	3	Core – 12 (48) Minor Elective V(a) – 4 (20) Minor Elective V(b) – 4 (20) Total Minor Electives – 8 (40) (Complete) Core / Elective (additional) - 4
		Major Core Course XI	-----	3	
		Major Core Course XII	-----	3	
	BSCBOT0305	Minor Elective Course V(a)	Economic Botany and Plant Anatomy	3	
		Minor Elective Course V (b)	-----	3	
		Major Core Lab Course X	-----	1	
		Major Core Lab Course XI	-----	1	

Semester	Course Code	Course Name	Course Name	Credit(s)/ week	Cumulated Credits Category-wise
		Major Core Lab Course XII *	-----	1	Total 24 (117)
	BSCBOT305(P)	Botany Lab V	Economic Botany and Plant Anatomy	1	
		Minor Elective Lab Course V (b)	-----	1	
		Core / Elective Course (Additional)*	-----	4	
VI (Even)		Major Core Course XIII	-----	4	Core – 8 (56) Core / Elective (additional) – 20* Total 28 (145)
		Major Core Course XIV	-----	4	
		Core / Elective Course (Additional)*	-----	4	
		Core / Elective Course (Additional)*	-----	4	
		Core / Elective Course (Additional)*	-----	4	
		Core / Elective Course (Additional)*	-----	4	
		Core / Elective Course (Additional)*	-----	4	