

Swami Rama Himalayan University
School of Biosciences
Teaching & Evaluation Scheme
M.Sc. Biotechnology program, Semester-III

			Teaching			Total Credits	Assessment				Duration / Mode	Course Attributes							Sustainable Development Goals		
			Hours/Periods/Credits				Sessional					End Semester	Course Attributes								
Course Category	Code	Course name	L	T	P	C	SE I	SE II	DDA	ESE		Total	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value		Professional Ethics	
Theory																					
DCC	MBTT 301	Pharmaceutical Biotechnology	3	0	0	3	25	25	50	100	200	3 h/Theory	✓	✓	✓		✓	✓	3,4,9		
DCC	MBTT 302	Plant & Animal Biotechnology	3	0	0	3	25	25	50	100	200	43h/Theory	✓			✓		✓	2,3,4,9,15		
DCC	MBTT 303	Food and Industrial Biotechnology	3	0	0	3	25	25	50	100	200	3 h/Theory	✓	✓	✓		✓	✓	2,3,6,9,12,13		
Open Elective (Multidisciplinary)	MBTE***	Elective I	2	0	0	2	25	25	50	100	200	3 h/Theory									
	MBTE***	Elective-II	2	0	0	2	25	25	50	100	200	3 h/Theory									
	MBCE***	Swayam/MOOCs	3	0	0	3	25	25	50	100	200	3h/Theory									
Elective courses (any two to choose from the following)																					
DCEC	MBTE 301	Transcriptomics, Proteomics & Metabolomics	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓		✓		✓	3,4,9,12,17	
DCEC	MBTE 302	Advanced Environmental Biotechnology	2	0	0	2	25	25	50	100	200	2h/Theory	✓		✓			✓	✓	3,6,7,9,11,12,13,14,15	
DCEC	MBTE 303	Vaccine development and Production	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓	✓		✓	✓	3,4,9,16,17	
DCEC	MBTE 304	Transgenic Animal Technology	2	0	0	2	25	25	50	100	200	2h/Theory	✓		✓		✓		✓	2,3,4,9,12	
DCEC	MBTE 305	Agrobiotechnology	2	0	0	2	25	25	50	100	200	2h/Theory			✓		✓			2,3,7,9,12,13,15	
DCEC	MBTE 306	Metabolic Engineering	2	0	0	2	25	25	50	100	200	2h/Theory	✓		✓		✓		✓	3,7,9,12,13	
DCEC	MBTE 307	Microbial Technology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓		✓	✓		2,3,6,7,9,12	
DCEC	MBTE 308	Nanobiotechnology	2	0	0	2	25	25	50	100	200	2h/Theory	✓		✓			✓		3,6,9,12,13	
DCEC	MBTE 309	Bioinformatics & System Biology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓		✓		✓	3,4,9,17	
DCEC	MBTE 310	Energy & Environment	2	0	0	2	25	25	25	100	200	2h/Theory	✓		✓		✓		✓	3,6,7,11,12,13,14,15	
DCEC	MBTE 311	Synthetic Biology	2	0	0	2	25	25	25	100	200	2h/Theory			✓			✓	✓	3,4,9,12,13,17	
Practical																					
DCC	MBTT 301	Pharmaceutical Biotechnology Practical		0	6	3	25	25	50	100	200	6h/Practical		✓	✓	✓		✓	✓	3,4,9,12,17	
DCC	MBTP 302	Plant & Animal Biotechnology Practical	0	0	6	3	25	25	50	100	200	6h/Practical	✓	✓	✓		✓	✓	✓	2,3,4,9,12,15	
DCC	MBTP 303	Food and Industrial Biotechnology Practical	0	0	6	2	25	25	50	100	200	6h/Practical	✓	✓	✓	✓	✓	✓	✓	2,3,4,9,12,13	
DCEC	MBTEP***	Elective I Practical	0	0	4	2	25	25	50	100	200	4h/Practical	✓		✓		✓	✓	✓	2,3,4,6,7,9,10,11,12,13,15,17	
DCEC	MBTEP***	Elective-II Practical	0	0	2	1	25	25	50	100	200	2h/Practical	✓	✓		✓	✓	✓		2,3,4,6,7,9,10,11,12,13,15,17	
Total Credits			16	0	24	20					1800										

L – Lecture, T – Tutorial, P – Practical, C – Credit

CC: Core Credits; DCCC: Discipline Centric Core Credits; DCEC: Discipline Centric Elective Credits; Open Elective/MOOCs;