

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

			Teaching			Total Credits	Assessment						Course Attributes							
			Hours/Periods/Credits				Sessional			End Semester										
Course Category	Code	Course name	L	T	P	C	SE I	SE II	DDA	ESE	Total	Duration / Mode	Course Attributes							Sustainable Development Goals
													Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
Theory																				
DCC	MMBT 301	Pharmaceutical Microbiology	3	0	0	3	25	25	50	100	200	3 h/Theory	✓	✓	✓		✓	✓	✓	3,4,9,12
DCC	MMBT 302	Industrial Microbiology	3	0	0	3	25	25	50	100	200	43h/Theory				✓		✓	✓	3,4,9,12,13,15
DCC	MMBT 303	Food & Dairy Microbiology	3	0	0	3	25	25	50	100	200	3 h/Theory	✓	✓	✓		✓	✓	✓	2,3,4,9,12
Open Elective (Multidisciplinary)	MMBE*	Elective I	2	0	0	3	25	25	50	100	200	3 h/Theory								
	MMBE**	Elective-II	2	0	0	3	25	25	50	100	200	3 h/Theory								
Elective courses (any two to choose from the following)																				
DCEC	MMBE 301	Microbial Technology	2	0	0	2	25	25	50	100	200	2h/Theory	✓		✓		✓		✓	3,4,7,9,12,13
DCEC	MMBE 302	Industrial Waste Management	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓	✓	✓	✓	✓	3,6,7,9,11,12,13,14,15
DCEC	MMBE 303	Genomics, Proteomics & Metabolomics	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓		✓		✓	✓	3,4,9,12,13,15
DCEC	MMBE 304	Soil and Agriculture Microbiology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓			✓		✓	2,3,4,6,12,13,15
DCEC	MMBE 305	Infection and Immunity	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓				✓		3,4,9,17
DCEC	MMBE 306	Epidemiology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓	✓	✓	✓	✓	3,4,9,11,13,17
DCEC	MMBE 307	Bioinformatics & System Biology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓		✓		✓	3,4,9,17
DCEC	MMBE 308	Medical Microbiology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓		✓			✓	3,4,,6,9,17
DCEC	MMBE 309	Nano Biotechnology	2	0	0	2	25	25	50	100	200	2h/Theory	✓			✓		✓	✓	3,4,9,12,13,1
DCEC	MMBE 310	Bioprocess Technology	2	0	0	2	25	25	50	100	200	2h/Theory	✓	✓	✓	✓	✓		✓	3,4,6,7,9,12,13
Practical																				
DCC	MMBP 301	Pharmaceutical Microbiology Practical	0	0	6	3	25	25	50	100	200	2h/Practical	✓	✓	✓	✓	✓		✓	3,4,9,12
DCC	MMBP 302	Industrial Microbiology Practical	0	0	6	3	25	25	50	100	200	2h/Practical	✓	✓	✓	✓		✓	✓	3,4,9,12,13
DCC	MMBP 303	Food & Dairy Microbiology Practical	0	0	6	3	25	25	50	100	200	2h/Practical	✓	✓	✓	✓	✓	✓	✓	2,3,4,9,12
DCEC	MMBEP*	Elective-I Practical	0	0	4	2	25	25	50	100	200	2h/Practical								2,3,4,9,12
DCEC	MMBEP**	Elective-II Practical	0	0	4	2	25	25	50	100	200	2h/Practical								2,3,4,9,12
Open Elective (Multidisciplinary)	MMBE***	MOOC's /NPTEL	3	0	0	1	25	25	50	100	200	2h/Practical								
Total Credits			16	0	26	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;