Integral University, Lucknow

Department of Biosciences

Study and Evaluation Scheme

Program: M.Sc. Biotechnology

Semester I

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Max. Marks	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Total	ESE				Employ ability	Entrepre neurship	Skill Develop ment	Gender Equality	Environment & Sustainability	Human Value	Professiona l Ethics	
THEORIES																					
1	BS401	Biomolecules: structure & Functions	Core	3	1	0	40	20	60	40	100	3:1:0	4								
2	BS402	Bioinformatics and IPR & Biosafety	Core	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√				√	
3	BS403	Essentials of Molecular Biology	Core	3	1	0	40	20	60	40	100	3:1:0	4								
4	BS404	Biophysical & Biochemical Methods	Core	3	1	0	40	20	60	40	100	3:1:0	4	√		√					
5	MT403	Biostatistics & Biomathematics	Core	3	1	0	40	20	60	40	100	3:1:0	4	√		√					
PRACTICAL																					
6	BS405	Biochemistry/Bioinformatics lab.	Practical	0	0	12	40	20	60	40	100	0:0:6	6	√	√	√					
			Total	**15**	**05**	**12**	**240**	**120**	**360**	**240**	**600**	**26**	**26**								

Semester II

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Max. Marks	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Total	ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES																					
1	BS411	Gene Expression & Regulation	Core	3	1	0	40	20	60	40	100	3:1:0	4								
2	BS412	Enzymology & Enzyme kinetics	Core	3	1	0	40	20	60	40	100	3:1:0	4								
3	BS413	Metabolism & Bioenergetics	Core	3	1	0	40	20	60	40	100	3:1:0	4								
4	BS414	Microbiology	Core	3	1	0	40	20	60	40	100	3:1:0	4	√		√					
5	Elective courses (Any one of the following)		Elective	3	1	0	40	20	60	40	100	3:1:0	4								
	BS415	Molecular Genetics																			
	BS416	Environmental Biology														√		√			
	BS417	Pharmaceutical Biology												√	√	√					
PRACTICAL																					
6	BS418	Microbiology / Enzymology Lab.	Practical	0	0	12	40	20	60	40	100	0:0:6	6	√	√	√		√			
7	BS419	Educational/Industrial tour									S/U					√			√		
			Total	**15**	**05**	**12**	**240**	**120**	**360**	**240**	**600**	**26**	**26**								

 # Note: The students of M.Sc. Biotechnology have to undergo the educational/Industrial tour in Biotechnology based industry/research institution for practical awareness at the end of 2nd semester. [S- satisfactory/ U-unsatisfactory].