



JOY UNIVERSITY  
semper paratus

## School of Health and Life Sciences

### Department of Microbiology

#### M.Sc Microbiology – I Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MSMB 1101	Microbial diversity	3	0	0	3	3
2.	MSMB 1102	Biochemistry	3	0	3	6	5
3.	MSMB 1103	Environmental microbiology	3	0	0	3	3
4.	MSMB 1104	Bioinstrumentation	3	0	0	3	3
5.		Communicative skills in English	2	0	0	2	2
6.	MSMB 1106	Microbial genetics	3	0	0	3	3
		<b>TOTAL</b>					<b>19</b>

#### M.Sc Microbiology – II Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MSMB 1201	Genetic Engineering	3	0	3	6	5
2.	MSMB 1202	Bioprocess technology	3	0	0	3	3
3.	MSMB 1203	Plant pathogen interaction	3	0	0	3	3
4.	MSMB 1204	Immunology	3	0	0	3	3
5.	MSMB 1205	Microbial Bioinformatics	3	0	3	6	5
6.	M SOE	General elective-I	3	0	0	3	3
		<b>TOTAL</b>					<b>22</b>

#### General elective-I

1. Intellectual Property Rights (IPR)
2. Entrepreneurship and start-ups

### M.Sc Microbiology – III Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MSMB 2101	Agriculture and soil microbiology	3	0	3	6	5
2.	MSMB 2102	Industrial microbiology	3	0	0	3	3
3.	MSMB 2104	Microbial Genomics and Proteomics	3	0	0	3	3
4.	MSMB 2105	Project-I and dissertation					10
		<b>TOTAL</b>					<b>21</b>

### M.Sc Microbiology – IV Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MSMB 2201	Medical Microbiology	3	0	0	3	3
2.	MSMB 2202	Food and Dairy microbiology	3	0	3	6	5
3.	MSMB 2202	Project-II and dissertation					10
		<b>TOTAL</b>					<b>18</b>

**Total credits = 80**