



CURRICULUM
for
POSTGRADUATE DEGREE PROGRAM

IN
MICROBIOLOGY

Scheme of Teaching and Evaluation 2025

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2025-26)



Department of Microbiology
GRAPHIC ERA (DEEMED TO BE UNIVERSITY)

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Graphic Era (Deemed to be University) M.Sc. Microbiology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2025-26)											
Semester I											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CWA	MSE	ESE	Total
Code	Title	Course Component									
MSCM101	BACTERIOLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM102	VIROLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM103	BIOCHEMISTRY	DSC	3	3	-	-	3	25	25	50	100
MSCM104	BIOINSTRUMENT ATION	DSC	3	3	-	-	3	25	25	50	100
MSCM105	CELL BIOLOGY	DSC	4	3	1	-	4	25	25	50	100
MSCM106	PROFESSIONAL COMMUNICATION	AEC	2	2	-	-	2	25	25	50	100
MSCM107	SEMINAR I	SM	1	-	-	-	-	-	-	100	100
GP1	GENERAL PROFICIENCY I	GP	1	-	-	-	-	100	-	-	100
LABS											
MSCML101	BACTERIOLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML102	VIROLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML103	BIOCHEMISTRY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML104	BIOINSTRUMENT ATION LAB	DSC	1	-	-	2	2	25	25	50	100
Total			24								1200



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Semester II											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CWA	MSE	ESE	Total
Code	Title	Course Component									
MSCM201	MICROBIAL GENETICS	DSC	3	3	-	-	3	25	25	50	100
MSCM202	IMMUNOLOGY & IMMUNOTECHNOLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM203	MYCOLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM204	MOLECULAR BIOLOGY & RDT	DSC	3	3	-	-	3	25	25	50	100
MSCM205a MSCM205b	MEDICAL MICROBIOLOGY/ PHARMACEUTICAL MICROBIOLOGY	DSE	3	3	-	-	3	25	25	50	100
MSCM206	CAREER SKILLS	SEC	2	2	-	-	2	25	25	50	100
MSCM207	SEMINAR II	SM	1	-	-	-	-	-	-	100	100
GP2	GENERAL PROFICIENCY II	GP	1	-	-	-	-	100	-	-	100
LABS											
MSCML201	MICROBIAL GENETICS LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML202	IMMUNOLOGY & IMMUNOTECHNOLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML203	MYCOLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML204	MOLECULAR BIOLOGY & RDT LAB	DSC	1	-	-	2	2	25	25	50	100
Total			23								1200



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Semester III											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CWA	MSE	ESE	Total
Code	Title	Course Component									
MSCM301	ENVIRONMENTAL MICROBIOLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM302	INDUSTRIAL MICROBIOLOGY	DSC	3	3	-	-	3	25	25	50	100
MSCM303	BIOINFORMATICS	DSC	3	3	-	-	3	25	25	50	100
MSCM304	RESEARCH & SCIENTIFIC WRITING	DSC	4	3	1	-	4	25	25	50	100
MSCM305a/ MSCM305b	FOOD AND DAIRY MICROBIOLOGY/ IPR, BIOETHICS & BIOSAFETY	DSE	3	3	-	-	3	25	25	50	100
MSCM306	SEMINAR III	SM	1	-	-	-	-	-	-	100	100
GP3	GENERAL PROFICIENCY III	GP	1	-	-	-	-	100	-	-	100
LABS											
MSCML301	ENVIRONMENTAL MICROBIOLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML302	INDUSTRIAL MICROBIOLOGY LAB	DSC	1	-	-	2	2	25	25	50	100
MSCML303	BIOINFORMATICS LAB	DSC	1	-	-	2	2	25	25	50	100
Total			21								1000



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Semester IV											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CWA	MSE	ESE	Total
Code	Title	Course Component									
MSCM401	DISSERTATION/ RESEARCH PROJECT	PROJ	16	-	-	-	-	-	-	100	100
Total			16								100