



List of Approved Courses for MS in MCB Program

Effective for Fall 2024 and tentatively for Spring 2025

This document was last updated on August 2, 2024. Course offerings are subject to change.

Term(s) Offered	Course Rubric	Course Title	Credit Hours	Disciplinary Area or Level
SP	MCB 406	Gene Expression & Regulation	3	BIOC
FA	MCB 408	Immunology	3	BIOC
SP	MCB 446	Physical Biochemistry	3	BIOC
SP	MCB 430	Molecular Microbiology	3	BIOC
FA, SP	MCB 450	Introductory Biochemistry	3	BIOC
SP	BIOC 455	Technqs Biochem & Biotech	4	BIOC
FA, SP	MCB 493*	Special Topics in Mol Cell Biol (Topics Change Regularly)		BIOC
FA <small>(Not Offered FA 24, offered FA 25)</small>	MCB 400	Cancer Cell Biology	3	CDB
SP	MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3	CDB
FA	MCB 471	Cell Structure and Dynamics	3	CDB
FA	MCB 474	Genetic Disorders & Counseling	3	CDB
SP	MCB 480	Eukaryotic Cell Signaling	3	CDB
FA, SP	MCB 493*	Special Topics in Mol Cell Biol (Topics Change Regularly)		CDB
FA	MCB 421	Microbial Genetics	3	MICR
SP	MCB 424	Microbial Biochemistry	3	MICR
SP	MCB 426	Bacterial Pathogenesis	3	MICR
FA	MCB 428	Microbial Pathogens Laboratory	2	MICR
FA	MCB 431	Microbial Physiology	3	MICR
FA	MCB 432	Computing in Molecular Biology	3	MICR
SP	MCB 435	Evolution of Infection Disease	3	MICR
FA	MCB 436	Global Biosecurity	1	MICR
FA	MCB 438	Virology	3	MICR
FA	MCB 401	Cellular Physiology	3	MIP
SP <small>(Offered SP 24 Not SP 25)</small>	MCB 402↔	Sys & Integrative Physiology	3	MIP
FA	MCB 413	Endocrinology	3	MIP
FA, SP	MCB 460	Neuroanatomy Laboratory	2	MIP
FA	MCB 461	Cell & Molecular Neuroscience	3	MIP
SP	MCB 462	Integrative Neuroscience	3	MIP
SP	MCB 465	Human Metabolic Disease	3	MIP
SP <small>(Not offered SP 24)</small>	MCB 466†	Neuro & Molecular Pharmacology	3	MIP

Offered SP 25)				
FA, SP	MCB 493*	Special Topics in Mol Cell Biol (Topics Change Regularly)		MIP
FA	MCB 501	Advanced Biochemistry	4	500-level
FA	MCB 502	Advanced Molecular and Cell Biology	4	500-level
NCBO	MCB 509	Curr Topics Molecular & Integrative Physiology	2	500-level
NCBO	MCB 521	Advanced Microbial Genetics	1	500-level
NCBO	MCB 526	Adv Bacterial Pathogenesis	1	500-level
FA, SP	MCB 529	Special Topics (Topics Change Regularly)	varies	500-level
FA, SP	MCB 530	Reproductive Physiol Seminar	1	500-level
NCBO	MCB 532	Advanced Microbial Physiology	1	500-level
SP	MCB 534	Advanced Microbial Metabolism	1	500-level
NCBO	MCB 553	Enzyme Reaction Mechanisms	3 or 4	500-level
FA	MCB 555	Anlys Biochemical Literature	2	500-level
FA	MCB 580	Res Ethics & Responsibilities (<i>second 8-week course</i>)	1	500-level
SP	MCB 585	Current Topics in Microbiology	1	500-level
FA, SP	BIOC 595	Biochemistry Seminar	1	500-level
FA, SP	CDB 595	Graduate Sem Cell Devel Biol	1	500-level
FA, SP	MICR 595	Microbiology Graduate Seminar	1	500-level
FA, SP	MIP 595	Seminars in Physiology	1	500-level

FA: Fall; **SP:** Spring; **NCBO:** Not currently being offered on a regular basis.

MCB 450 is only available to students who have not already taken MCB 354 of the equivalent.

Courses, or their equivalents, taken as an UG prior to admission to this program, may not be counted toward the requirements for this program.

*MCB 493 counts for different disciplinary areas depending on the content of each section of the course (e.g. MCB 493 sxn VIR follows the MICR disciplinary area).

♠ MCB 402 will be offered SP 2024, but **not** in SP 2025.

‡ MCB 466 will **not** be offered SP 2024, but in SP 2025.