



Approved List of Advanced Courses for MCB Majors and Minors
Revised and Effective for Fall 2019

The MCB major requires at least 15 hours (minimum of 4 courses) at the 300- or 400-level *from this approved list*. One course with a laboratory component is required. Those courses, which count as an advanced laboratory course, are marked with an asterisk (*). The College of LAS, for its Sciences and Letters Curriculum, requires each student to earn at least 21 hours in advanced courses (MCB advanced hours count toward this total). Please visit www.las.uiuc.edu/students/requirements/minimum for more information about the college requirements. *Only courses from this approved list will count for the MCB advanced hour requirement. Graduate level courses (500- or 600- level) will NOT count as advanced MCB hours.*

This document was last updated on March 13, 2019

Note: schedule is subject to change

Term (s) Offered	Course	Course Title	Cr Hrs	* Lab Course	Instructors (Coordinator)	Cross Listed Courses
FA, SP	MCB 300	Microbiology	3		FA: Steven Blanke & William Metcalf (R. Alt, Coord.) SP: Steven Blanke & William Metcalf (R. Alt, Coord.)	
FA, SP	MCB 301	Experimental Microbiology	3	*	Jack Ikeda (Renee Alt, Coordinator)	
FA	MCB 314	Introduction to Neurobiology	3		Daniel Llano	NEUR 314
FA	MCB 316† See note below	Genetics and Disease	4		Mary Schuler	
SP	MCB 317† See note below	Genetics and Genomics	4		David Rivier	
SP	MCB 320	Mechanisms of Human Disease	3		Eric Bolton	
FA, SP	MCB 364 previously MCB 493 ECB	Experimental Cell Biology	2	*	Lyne Levesque	
FA	MCB 400	Cancer Cell Biology	3		Supriya Prasanth	
FA	MCB 401	Cell & Membrane Physiology	3		Catherine Christian	
SP	MCB 402	Sys & Integrative Physiology	3		Erik Nelson and Nien-Pei Tsai	
SP (not SP19)	MCB 406	Gene Expression & Regulation	3		Hong Jin	BIOC 406
SP	MCB 408	Immunology	3		Beth Stadtmueller	
SP	MCB 410	Developmental Biology, Stem Cells and Regenerative Medicine	3		Xin Li	
FA	MCB 413	Endocrinology	3		Milan Bagchi and Lori Raetzman	
SP (odd years only)	MCB 421	Microbial Genetics	3		John Cronan	
SP (even years only)	MCB 424	Microbial Biochemistry	3		William Metcalf	
FA (not FA 19)	MCB 426	Bacterial Pathogenesis	3		Brenda Wilson	
FA	MCB 428	Microbial Pathogens Laboratory	2	*	Jack Ikeda	
SP	MCB 429	Cellular Microbiology & Disease	3		Thomas Kehl-Fie	
FA (not FA 19)	MCB 431	Microbial Physiology	3		Carin Vanderpool	
SP	MCB 432	Computing in Molecular Biology	3		Mengfei Ho	
FA, SP	MCB 433† See note below	Virology & Viral Pathogenesis	3		Daniel Rock	PATH 433
SP	MCB 435	Evolution of Infectious Disease	3		Rachel Whitaker	IB 442
FA	MCB 436	Global Biosecurity	1		S. Blanke, C. Brooke, J. Slauch and B. Wilson	
						Over →

Term (s) Offered	Course	Course Title	Cr Hrs	* Lab Course	Instructors (Coordinator)	Cross Listed Courses
SP	MCB 442	Comparative Immunobiology	4		A. Steelman	ANSC 450, PATH 410
SP	MCB 446	Physical Biochemistry	3		Kai Zhang	BIOC 446, CHEM 472
SP	MCB 458	Basic Human Pathology	3		Gregory Freund (Alejandra Stenger, Coordinator)	
FA	MCB 461	Cell & Molecular Neuroscience	3		Hee Jung Chung	NEUR 461
SP	MCB 462	Integrative Neuroscience	3		Martha Gillette and Rhanor Gillette	NEUR 462
SP	MCB 465	Human Metabolic Disease	3		Jongsook Kemper	
FA	MCB 471	Cell Structure and Dynamics	3		William Brieher	
SP	MCB 480	Eukaryotic Cell Signaling	2		Jie Chen	
FA, SP	MCB 493 APL	Advanced Physiology Lab	2	*	Chester Brown	
FA, SP	MCB 493 RCB	Archaeal Cell Biology	1		Rachel Whitaker	
SP	MCB 493 EPI	Epigenetics	3		Andrew Belmont	
SP	MCB 493 VIR	Virology	3		Christopher Brooke	
FA	BIOC 440B†	Physical Chemistry Principles	4		Emad Tajkhorshid	CHEM 440B
SP	BIOC 455	Techniques in Biochem & Biotech	4	*	Logan Hurst	
FA	BIOC 460 <small>Limited seats available</small>	Biochemistry Senior Seminar, Advanced Composition	3		David Shapiro	
FA	BIOP 401	Introduction to Biophysics	3		Satish Nair	
FA	NEUR 403†	Memory and Amnesia	3		Hillary Schward	PSYC 403
SP	NEUR 413	Psychopharmacology	3		Joshua Gulley	PSYC 413
FA	NEUR 414	Brain, Learning, and Memory	3		Amy Perkins	PSYC 414

FA: Fall; SP: Spring; NCBO: Not currently being offered on a regular basis; TBD: To be determined.

†MCB 316 and 317: Credit is not given for both MCB 316 and MCB 317. Students can take one or the other course, but not both.

†MCB 433/PATH 433: This course is only approved as advanced hours for students with a catalog year prior to fall 2016. Please check with an MCB advisor to confirm that this will count as an approved advanced course for you before enrolling.

†BIOC 440B: Only Section B is approved as an advanced MCB course.

†NEUR 403: This course is only approved as advanced hours for students with a catalog year prior to fall 2016. Please check with an MCB advisor to confirm that this will count as an approved advanced course for you before enrolling. Section UG3, which is 3 credit hours, is intended for undergraduate students. MCB students should take this section. Section G4, which is 4 credit hours, is restricted to graduate students.

Note: graduate level courses (500- or 600- level) Will NOT count as advanced MCB hours, but students are welcome to enroll in them with permission from the instructor.

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