



# MCB Advising Program

School of Molecular and Cellular Biology  
University of Illinois, Urbana-Champaign

(217) 333-6774 | [advising@mcb.illinois.edu](mailto:advising@mcb.illinois.edu) | [mcb.illinois.edu/undergrad/advising](http://mcb.illinois.edu/undergrad/advising)



## Approved List of Advanced Courses for MCB Majors and Minors Revised and Effective for Summer and Fall 2021

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](http://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 15, 2021***

***Note: schedule is subject to change***

Term (s) Offered	Course	Course Title	Cr Hrs	* Lab Course	Instructors (Coordinator)	Cross Listed Courses
FA	MCB 300	Microbiology	3		Steven Blanke (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, SU	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	Eukaryotic Cell Biology Laboratory	2	*	Lyne Levesque	
FA	MCB 400	Cancer Cell Biology	3		Supriya Prasanth	
FA	MCB 401	Cellular Physiology	3		Catherine Christian-Hinman	
SP	MCB 402	Sys & Integrative Physiology	3		Erik Nelson and Nien-Pei Tsai	
SP	MCB 406	Gene Expression & Regulation	3		Hong Jin	BIOC 406
FA	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	MCB 424	Microbial Biochemistry	3		William Metcalf	
SP	MCB 426	Bacterial Pathogenesis	3		Thomas Kehl-Fie	
FA	MCB 428	Microbial Pathogens Laboratory	2	*	Jack Ikeda	
FA	MCB 431	Microbial Physiology	3		Paolo Mera	
FA	MCB 432	Computing in Molecular Biology	3		Mengfei Ho	
SP	MCB 435	Evolution of Infectious Disease	3		Rachel Whitaker	IB 442
FA	MCB 436	Global Biosecurity	1		S. Blanke, C. Brooke, J. Slauch, J. Shisler and B. Wilson	
SP	MCB 442	Comparative Immunobiology	4		A. Steelman	ANSC 450, PATH 410
SP	MCB 446	Physical Biochemistry	3		Kai Zhang	BIOC 446, CHEM 472
NCBO	MCB 458	Basic Human Pathology	3			
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
						Over →

Term (s) Offered	Course	Course Title	Cr Hrs	* Lab Course	Instructors (Coordinator)	Cross Listed Courses
SP	MCB 465	Human Metabolic Disease	3		Sayee Anakk	
FA <small>(not offered FA21)</small>	MCB 471	Cell Structure and Dynamics	3		William Brieher	
SP	MCB 480	Eukaryotic Cell Signaling	3		Jie Chen	
FA/SP <small>(FA21 uncertain)</small>	MCB 493 APL	Advanced Physiology Lab	2	*	Chester Brown	
FA	MCB 493 EPI	Epigenetics	3		Andrew Belmont	
FA	MCB 493 GDC	Genetic Disorders and Counseling	3		Stephanie Ceman	
FA	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	*	Dustin Buntrock	
FA	BIOC 460 <small>Limited seats available</small>	Biochemistry Senior Seminar, Advanced Composition	3		David Shapiro	
FA	BIOP 401	Introduction to Biophysics	3		Taras Pogorelov	
SP	NEUR 413	Psychopharmacology	3		Joshua Gulley and John Pfeiffer	PSYC 413
SP	NEUR 414	Brain, Learning, and Memory	3		James Hinman	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.

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

**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.**

***This document was last updated March 15, 2021  
Schedule is subject to change***