

**Approved List of Advanced Courses for MCB Majors**  
**Revised and Effective for Fall 2011**

The MCB major requires at least 15 hours 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 7, 2011***

Term (s) Offered	Course	Course Title	Cr Hrs	Lab Course *	Instructor(s)	Cross Listed Courses
FA, SP	MCB 300	Microbiology	3		Jack Ikeda, Rachel Whitaker	
FA, SP	MCB 301	Experimental Microbiology	3	*	FA: Renee Alt, Jack Ikeda SP: Renee Alt, Gail Grabner	
FA	MCB 314	Introduction to Neurobiology	3		Mark Nelson	NEUR 314
FA	MCB 316	Genetics and Disease	4		<a href="#">Mary Schuler</a>	
SP	MCB 317	Genetics and Genomics	4		David Rivier	
FA	MCB 400	Cancer Cell Biology	4		<a href="#">Kevin Xiang</a> , Supriya Gangadharan Prasanth	
FA	MCB 401	Cell & Membrane Physiology	3		<a href="#">Claudio Grosman</a>	
SP	MCB 402	Sys & Integrative Physiology	3		Willem Els, <a href="#">Ann Nardulli</a> , Essie Meisami	
FA	MCB 403	Cell & Membrane Physiology Lab	2	*	Carl Malmgren	
SP	MCB 404	Sys & Integrative Physiol Lab	2	*	Carl Malmgren	
SP	MCB 406	Gene Expression	3		<a href="#">Craig Mizzen</a> , Raven Huang	BIOC 406
SP	MCB 408	Immunology	3		Ed Roy	
SP	MCB 410	Developmental Biology	4		Phillip Newmark	
FA	MCB 412	Cellular Molec Neurobiology	3		Hee Jung Chung	NEUR 422
SP	MCB 413	Endocrinology	3		<a href="#">Milan Bagchi</a> , Eric Bolton, Kim Kemper	
FA	MCB 416	Neuroethology (Systems and Integrative Neuroscience)	3		<a href="#">Rhanor Gillette</a>	NEUR 426 BIOE 419, BIOP 419, NEUR 419
SP (even years only)	MCB 419	Brain, Behavior & Info Process	3		<a href="#">Mark Nelson</a>	
FA	MCB 421	Microbial Genetics	3		<a href="#">Jeffrey Gardner</a>	
SP	MCB 424	Microbial Biochemistry	3		<a href="#">William Metcalf</a>	
FA	MCB 426	Bacterial Pathogenesis	3		<a href="#">Brenda Wilson</a>	
FA	MCB 428	Bacterial Pathogens Laboratory	2	*	Gail Grabner	
SP	MCB 429	Cellular Microbiology & Disease	3		Steven Blanke	
FA	MCB 431	Microbial Physiology	3		Carin Vanderpool	
SP	MCB 432	Computing in Molecular Biology	3		<a href="#">Gary Olsen</a>	
SP	MCB 433	Viral Pathogenesis	3		Dongwan Yoo and Daniel L. Rock	PATH 433
SP	MCB 434	Food & Industrial Microbiology	3		<a href="#">Scott Martin</a> , M. Miller	FSHN 471
SP	MCB 435	Microbial Ecology & Evolution	3		Rachel Whitaker	
SP	MCB 442	Comparative Immunobiology	4		<a href="#">H. Rex Gaskins</a> , <a href="#">Keith Kelley</a>	ANSC 450, PATH 510
SP	MCB 446	Physical Biochemistry	3		Robert Gennis, <a href="#">Satish Nair</a>	BIOC 446, CHEM 472

Term (s) Offered	Course	Course Title	Cr Hrs	Lab Course *	Instructor(s)	Cross Listed Courses
SP	MCB 460	Regeneration and Medicine	3		<a href="#">Jo Ann Cameron</a>	
SP (odd years only)	MCB 480	Eukaryotic Cell Signaling	3		<a href="#">Jie Chen</a>	
SP	MCB 481	Developmental Neurobiology	3		<a href="#">Lori Raetzman</a>	NEUR 481
<b>FA, SP</b>	MCB 493†	Special Topics Mol Cell Biol	2		<a href="#">See online Class Schedule</a> Section BAW approved for Fall '11	
<b>FA</b>	BIOC 440B†	Physical Chemistry Principles	4		Robert Gennis, <a href="#">Satish Nair</a>	CHEM 440B
<b>FA, SP</b>	BIOC 455	Technqs Biochem & Biotech	4	*	Gail Grabner	
<b>FA</b>	BIOP 401	Introduction to Biophysics	3		<a href="#">Maria Spies</a>	
NCBO	BIOP 470	Computational Chemical Biology	3		<a href="#">Zaida Luthey-Schulten</a>	CHEM 470
FA	NEUR 403	Memory and Amnesia	3		<a href="#">Neal Cohen</a>	PSYC 403
NCBO	NEUR 411†	Bio Psych Lab	4	†	<a href="#">Neal Cohen</a> , Rachael D. Rubin	PSYC 411
SP	NEUR 413	Psychopharmacology	3		<a href="#">Joshua Gulley</a>	PSYC 413
<b>FA, SP</b>	NEUR 414	Brain, Learning, and Memory	3		<a href="#">Paul Gold</a>	PSYC 414
SP	NEUR 451	Neurobio of Aging	3		Donna Korol	PSYC 451, KINES 458

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

†MCB 493: There may be specific sections of MCB 493 (i.e. PAN and DFC) that may count toward advanced MCB hours, but most will not. Please consult an advisor to confirm whether the section of MCB 493 you take will qualify for advanced MCB hours and/or an advanced lab.

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

†NEUR 411 has been approved for repeated credit, but only credit hours associated with the first enrollment in the course will be counted as advanced hours toward the MCB degree. This course will *not* count as an advanced MCB lab.

**Note: graduate level courses (500- or 600- level) Will NOT count as advanced MCB hours.**

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