

MCB Upper Division Electives Guide (Summer/Fall 2021)

Course availability is subject to change. Please check the current Schedule of Classes for current course offerings.

Not every elective may apply to your degree. Check with your MCB advisor if you have questions about your elective requirements.

<u>Course</u>	<u>Course Title</u>	<u>Units</u>	<u>Core</u>	<u>Lab</u>	<u>Wrt.</u>	<u>Honors Section</u>	<u>Prerequisites</u>	<u>Special Registration Instructions</u>	<u>Term</u>
MCB 310	<u>Improving Learning in Science Classrooms</u>	3			✗		none		Fall
MCB 325	<u>The Biology of Cancer</u>	3-4	✗			✗	MCB 181R		Fall
MCB 330	<u>Critical Reasoning & Problem Solving in Biomedicine</u>	1					MCB 181R		Fall
MCB 391	<u>Preceptor</u>	1-3					N/A	Instructor permission required.	Fall
MCB 391A	<u>181 Laboratory Preceptor</u>	3					N/A	Instructor permission required.	Fall
MCB 396I	<u>Career Exploration and Professional Dev.</u>	1					none		Fall
MCB 397A	<u>Biology Outreach Development</u>	1					none		Fall
MCB 404	<u>Bioethics</u>	3-4			✗	✗	MCB 181R, ECOL 182R		Fall, Summer
MCB 422	<u>Problem Solving with Genetic Tools</u>	3		✗	✗		MCB 304 or ECOL320 or PLS 312		Fall, Summer
MCB 437	<u>Life in Extreme Environments</u>	3					none		Fall
MCB 447	<u>Big Data in Molecular Biology and Biomedicine</u>	3					MCB 181R; MATH 263; MCB 315, or equivalent; MATH 122B or MATH 125		Fall
MCB 479	<u>Art of Scientific Discovery</u>	3					none		Fall
MCB 480	<u>Introduction to Systems Biology</u>	3	✗				MCB 181R/L and MATH 129		Fall
MCB 497A	<u>Special Tutoring Workshop</u>	1-5					Open primarily to juniors and seniors in life sciences with at least a B in MCB 181R	Instructor permission required.	Fall, Summer
MCB 392/492	<u>Directed Research</u>	1+		✗			none	Registration form required.	Fall, Summer
MCB 498	<u>Senior Capstone I</u>	3		✗			Senior standing	Registration form required.	Fall, Summer
MCB 498	<u>Senior Capstone II</u>	3			✗		Senior standing	Registration form required.	Fall, Summer
MCB 498H	<u>Senior Honors Thesis I</u>	3		✗			Senior standing	Registration form required.	Fall, Summer
MCB 498H	<u>Senior Honors Thesis II</u>	3			✗		Senior standing	Registration form required.	Fall, Summer
ECOL 326	<u>Genomics</u>	3					ECOL 182R/L		Fall
ECOL 430	<u>Conservation Genetics</u>	3					Genetics course or instructor consent		Fall, Summer
PLS 340	<u>Introduction to Biotechnology</u>	3					MCB 181R		Fall
PLS 448A	<u>Plant Biochemistry and Metabolic Engineering</u>	3	✗				CHEM 241A/B, BIOC 462A/B		Fall
PLS 359	<u>Plant Cell Structure and Function</u>	3					MCB 181R, ECOL 182R, CHEM 241A/243A		Fall, Summer
NSCS 307	<u>Cellular Neurophysiology</u>	3-4				✗	Department consent required		Fall
MIC 421B	<u>Microbiological Techniques</u>	5	✗	✗			MIC 205A/L	MCB majors may register on UAccess after priority req.	Fall
BIOC 384	<u>Foundations in Biochemistry</u>	3					MCB 181R, CHEM 241A/243A		Fall, Summer
BIOC 385	<u>Metabolic Biochemistry</u>	3					MCB 181R, CHEM 241A/243A		Fall, Summer
BIOC 462A	<u>Biochemistry</u>	4	✗				MCB 181R, CHEM 241B/243B, MATH 122B	Contact omendoza@email.arizona.edu	Fall
PSIO 467	<u>Endocrine Physiology</u>	3	✗				PSIO 201, PSIO 202	contact bertha@email.arizona.edu after priority reg.	Fall