MOLECULAR & CELLULAR BIOLOGY: HONORS, BSLAS

for the degree of Bachelor of Science in Liberal Arts and Sciences Major in Molecular & Cellular Biology, Honors Concentration

The Molecular and Cellular Biology Honors Concentration is designed for students whose preparation and interests motivate them to desire a more intensive undergraduate biology experience and to prepare for graduate or professional school. The MCB Honors Concentration is based on the MCB concentration (http://catalog.illinois.edu/undergraduate/las/academic-units/molecular-cell-bio/molecular-cellular-biology-concentration/). Students must satisfy all of the requirements for the MCB concentration in addition to the requirements for the MCB Honors Concentration. Students interested in the MCB Honors Concentration (http://mcb.illinois.edu/undergrad/honors/) should contact the MCB Honors Concentration coordinator (shawna@illinois.edu) during the freshman year for more information.

Undergraduate degree programs in Molecular & Cellular Biology
Biochemistry, BS (http://catalog.illinois.edu/undergraduate/las/biochemistry-bs/)

Molecular & Cellular Biology, BSLAS (http://catalog.illinois.edu/undergraduate/las/molecular-cellular-biology-bslas/)

Molecular & Cellular Biology Honors Concentration, BSLAS (p. 1)

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Certain advanced courses may be taken prior to completion of the MCB 250 MCB 250 MCB 250-MCB 253, MCB 354 MCB 354 MCB 354 sequence with permission of an academic advisor. A minimum of 15 hours of 300- or 400-level courses in MCB from the approved list is required.

In addition, undergraduate research (MCB 290, or departmental equivalent) is strongly recommended for students planning to go to graduate school. No more than 10 hours of MCB 290, or departmental equivalent credit may be counted towards the 120 hours required for a degree in MCB.

Students earning a degree in Molecular and Cellular Biology may not also earn a second degree in the Specialized Curriculum in Biochemistry.

Students earning a degree in Molecular and Cellular Biology may not double major in Integrative Biology.

Distinction

Students in MCB can qualify for Distinction via one of the following:

Distinction for Excellence in Research:

To be eligible for graduation with Distinction a student must:

Complete 3 semesters of MCB 290 for 2 credit hours or more each semester. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator.

To be eligible for graduation with High Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester of MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.25 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee.

To be eligible for graduation with Highest Distinction a student must:

Complete 2 semesters of MCB 290 for 2 credit hours or more each semester. Complete 1 semester MCB 492 for 3 credit hours or more. Maintain a minimum cumulative GPA of 3.90 at the end of penultimate semester. Give at least one poster presentation at the Undergraduate Research symposium or other approved venue. Obtain a letter of support from their Principal Investigator. Submit a written thesis that is approved by the Distinction Committee. Distinction for Excellence in Academics:

To be eligible for graduation with Academic Distinction a student must:

Maintain a major GPA of 3.90 or higher in the MCB major (biology, chemistry, physics and math courses for the MCB major) at the end of their penultimate semester.

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/) **requirements including the campus general education language requirement.**
Minimum required major and supporting course work: 67-71 hours, including 21 hours of 300- or 400-level courses; 12 hours of 300- and 400-level courses in the major must be taken on this campus.
Minimum hours required for graduation: 120 hours.

Code	Title	Hours
MATH 220	Calculus	4-5
or MATH 221	Calculus I	
MATH 231	Calculus II	3
or STAT 212	Biostatistics	
Select one group of courses:		8-10
CHEM 102	General Chemistry I	
& CHEM 103	and General Chemistry Lab I	
& CHEM 104	and General Chemistry II	
& CHEM 105	and General Chemistry Lab II	
CHEM 202	Accelerated Chemistry I	
& CHEM 203	and Accelerated Chemistry Lab I	
& CHEM 204	and Accelerated Chemistry II	
& CHEM 205	and Accelerated Chemistry Lab II	
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
Select one group of courses:		10-12
PHYS 101	College Physics: Mech & Heat	
& PHYS 102	and College Physics: E&M & Modern	
PHYS 211	University Physics: Mechanics	
& PHYS 212	and University Physics: Elec & Mag	
& PHYS 213	and Univ Physics: Thermal Physics	
& PHYS 214	and Univ Physics: Quantum Physics	
IB 150	Organismal & Evolutionary Biol	4

MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 251	Exp Techniqs in Molecular Biol	2
MCB 252	Cells, Tissues & Development	3
MCB 253	Exp Techniqs in Cellular Biol	2
MCB 354	Biochem & Phys Basis of Life	3
At least four additional courses at the 300- to 400-level from the Approved List of Advanced Courses for MCB Majors are also required, including one lab course. (http://mcb.illinois.edu/undergrad/courses/advanced/)		15-16

Code	Title	Hours
Complete 5 honors discussion sections in consecutive order:		
MCB 297	MCB Honors Discussion (Section A)	1
MCB 297	MCB Honors Discussion (Section B)	1
MCB 297	MCB Honors Discussion (Section C)	1
MCB 298	MCB Honors Lab Discussion (Section A)	1
MCB 298	MCB Honors Lab Discussion (Section B)	1
Complete 4 or more additional MCB Honors Option courses [1]		

[1] *Students must consult the Honors Coordinator about MCB Honors Option courses. Only* MCB 290 *may be repeated, to a maximum of twice, although continuing 290 beyond two semesters is encouraged.*

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a fourth level of a language other than English. See the corresponding section on the Degree and General Education Requirements page *(*http://catalog.illinois.edu/general-information/degree-general-education-requirements/*).*

First Year

First Semester	Hours		Second Semester	Hours
Free elective course	1		MATH 231 or STAT 212	3
MATH 220 or 221	5		CHEM 104 or 204	3
CHEM 102 or 202	3		CHEM 105 or 205	1
CHEM 103 or 203	1		General Education course or Composition 1	3
Composition I or General Education course	4		General Education Course	3
	14			**13**

Second Year

First Semester	Hours		Second Semester	Hours
PHYS 101 or 211	5		PHYS 102 or 212	5
CHEM 232	4		IB 150	4
CHEM 233	2		MCB 150	4
Language Other Than English (3rd level)	4		Language Other Than English (4th level)	4
General Education course	3			
	18			**17**

Third Year

First Semester	Hours		Second Semester	Hours
Free elective course (or PHYS 213)	3		Free elective course (or PHYS 214)	3
MCB 250	3		MCB 252	3
MCB 251	2		MCB 253	2
MCB 297 (Section A)	1		MCB 297 (Section B)	1
MCB 298 (Section A)	1		MCB 298 (Section B)	1
General Education Course	3		General Education Course	3
General Education Course	3		MCB Honors Option course	1
	16			**14**

Fourth Year

First Semester	Hours		Second Semester	Hours
MCB 354	3		300-400 level coursework	3
300-400 level coursework	3		300-400 level lab course	3
300-400 level coursework	3		General Education Course	3
MCB 297 (Section C)	1		MCB Honors Option course	1
General Education Course	3		MCB Honors Option course	1
MCB Honors Option course	1		Free elective course	3
	14			**14**

Total Hours 120

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School of Molecular & Cellular Biology website (https://mcb.illinois.edu/undergrad/)
School Faculty (https://mcb.illinois.edu/people/)

MCB advising (https://mcb.illinois.edu/undergrad/advising/)
MCB advising email (advising@mcb.illinois.edu)

Overview of College Admissions & Requirements: Liberal Arts & Sciences (http://catalog.illinois.edu/schools/las/academic-units/)

College Liberal Arts and Sciences website (https://las.illinois.edu/)