MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION

For the Degree of Bachelor of Science in Liberal Arts and Sciences

Major in Sciences and Letters Curriculum

E-mail address: undergrad@mcb.illinois.edu

Students receive a Degree of Bachelor of Science in Liberal Arts and Sciences

Minimum required courses: 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.

General Education requirements: Students must complete the Campus General Education (https://courses.illinois.edu) requirements including the campus general education language requirement.

Certain advanced courses may be taken prior to completion of the MCB 250-MCB 253, 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, MCB 291 or departmental equivalent) is strongly recommended for students planning to go to graduate school. No more than 10 hours of MCB 290, MCB 291 or departmental equivalent credit may be counted towards the 120 hours required for a degree in MCB.

Minimum hours required for graduation: 120 hours.

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.

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 10:and General Chemistry Lab I
& CHEM 10:and General Chemistry II
& CHEM 10:and General Chemistry Lab II

CHEM 202 Accelerated Chemistry I
& CHEM 203:and Accelerated Chemistry Lab I
& CHEM 204:and Accelerated Chemistry II
& CHEM 204: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 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)

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 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.