

The Molecular & Cell Biology Department has five undergraduate major emphases. The lower-division requirements, shown below, are the same for all major emphases except track 2 of Biochemistry & Molecular Biology. Students in this track must also take Chemistry 1B and replace Chemistry 3A/3AL, 3B/3BL with Chemistry 112A and 112B.

- [Biochemistry & Molecular Biology](#) (shows as 966: MO&CEL BIO P1 I, EM 1 on some official University documents)
 - Track 1 - Biochemistry & Molecular Biology
 - Track 2 - Biological Chemistry

- [Cell & Developmental Biology](#) (shows as 971: MO&CEL BIO PII, EM 2 on some official University documents)
 - CDB: Cell & Systems Biology
 - CDB: Medical Biology & Physiology

- [Genetics, Genomics & Development](#) (shows as 967: MO&CEL BIO P1 I, EM 2 on some official University documents)
 - Track 1 - Genetics, Genomics & Development
 - Track 2 - Developmental Genetics

- [Immunology & Pathogenesis](#) (shows as 968: MO&CEL BIO P1 I, EM 3 on some official University documents)
 - Track 1 - Immunology
 - Track 2 - Infectious Diseases

- [Neurobiology](#) (shows as 972: MO&CEL BIO PII, EM 3 on some official University documents)

Biochemistry & Molecular Biology		Genetics, Genomics & Development		Immunology & Pathogenesis		Cell & Developmental Biology
Track 1: BMB	Track 2: Biological Chemistry	Track 1: GGD	Track 2: Developmental Genetics	Track 1: Immunology	Track 2: Infectious Diseases	Cell & Systems Biology
MCB C100A	Chemistry 112A	MCB C100A	MCB 102	MCB C100A	MCB 102	MCB 102
MCB 100B	Chemistry 112B	MCB 110	MCB 104	MCB 110	MCB 104	MCB 104
MCB 110	MCB C100A	MCB 140	MCB 141	MCB 104 OR MCB 140	MCB 150	MCB 130A
MCB 140 OR MCB C148	Chemistry 130B	MCB 140L	MCB 140L	MCB 150	MCB 150L	MCB 133L
MCB 110L	Chemistry 135	GGD Elective A or B	GGD Elective A or B	MCB 150L	Immuno Elective A	CD8 Elective A
BMB Elective	MCB 110L	GGD Elective B	GGD Elective B	Immuno Elective C	Immuno Elective B	CD8 Elective A
	MCB 130A OR MCB 140					

Lower-division prerequisites

- Calculus: Math 10A, 10B (or Math 1A/1B)*
- General Chemistry: Chemistry 1A/1AL**
- Organic Chemistry: Chemistry 3A/3AL, 3B/3BL**
- General Biology: Biology 1A /1AL, 1B
- Calculus-based Physics: Physics 8A, 8B

*Please note that Math 16A and/or Math 16B are not accepted by the MCB major. Any deviations from the suggested courses should be approved by the UAO. **Students who plan to major in BMB Track 2 (Biological Chemistry) must also take Chemistry 1B and must substitute Chemistry 112A/112B for Chemistry 3A/3AL, 3B/3BL.

Course number	Course Title	Semester	Units
Math 10A	Methods of Mathematics: Calculus, Statistics and Combinatorics	F	4
Math 10B	Methods of Mathematics: Calculus, Statistics and Combinatorics	Sp	4
Chemistry 1A/1AL	General Chemistry	F, Sp, Su	3 + 1
Chemistry 3A/3AL	Chemical Structure and Reactivity	F, Sp, Su	3 + 2
Chemistry 3B/3BL	Chemical Structure and Reactivity	F, Sp, Su	3 + 2
Biology 1A/1AL	General Biology	F, Sp, Su	3 + 2
Biology 1B	General Biology	F, Sp, Su	4
Physics 8A*	Introductory Physics (calculus based)	F, Sp, Su	4
Physics 8B*	Introductory Physics (calculus based)	F, Sp, Su	4
*Physics 7A can be taken in place of 8A and Physics 7B in place of 8B			

[We have posted some typical 4-year plans for you .](#)