

Checklist for the Molecular and Cellular Biology (MCB) Concentration in Biology



1. Introductory Biology

Biology 1102 OR Biology 1109

2. Molecular and Cellular Biology—4 courses



Biol 2112: Genetics and Molecular Biology – Fall



Biol 2124: Biochemistry and Cell Biology – Fall

Or

Biol 2134 Biochemistry and Molecular Biology - Spring



Biol 2499: Population Genomics - Fall

or

Biol 2316: Evolution – Spring



Biol 2175: Developmental Biology - Fall

or

Biol 2118: Microbiology - Spring

3. Chemistry—2 courses



Chemistry 1092 **or** Chemistry 1102 **or** Chemistry 1109 **or** any Chemistry above 1200



Chemistry 2250: Organic Chemistry I – Fall

4. Physical, Mathematical, Statistical, or Computational—2 courses (each from a different group below)



Computer Science (above 1100) _____

Physics (above 1100) _____

Math (above 1299) or Psychology 2520 _____



5. Advanced Topics in Molecular and Cellular Biology—2 courses (At least one of which must be above 3000)

Biol 2504: Cell Signaling

Biol 2551: Molecular Ecology

Biol 2553: Neurophysiology

Biol 2566: Molecular Neurobiology

Biol 2557: Immunology

Biol 2559: Cancer Biology

Biol 3304: The RNA World

Biol 3307: Evolutionary Developmental Biology

Biol 3310: Advanced Evolution

Biol 3313: Microbiome Science

Biol 3314: Advanced Genetics and Epigenetics

Biol 3317: Molecular Evolution

Biol 3318: Advanced Molecular Microbiology

Biol 3333: Advanced Cell and Molecular Biology

Biol 3368 HIV Pathogenesis and Immunity



6. Elective: Additional Biological Science course – 1 course

Biol 1101: Biological Principles I – Fall

Any Biology course numbered 2000 or higher not counted above
(except for Advanced or Intermediate Independent Study)

Chemistry 2320: Biochemistry

Chem 2330: Biochemistry of Membranes