Bachelor of Science in Biology
MOLECULAR CELL BIOLOGY CONCENTRATION

Lower-Division Core in Biology (8)
- BIOL 130 (Introductory Cell Biology and Genetics, 4 units)
- BIOL 131 (Diversity and Ecology, 4 units)

Physical Sciences & Mathematics (36)
- CHEM 115A & 115B (General Chemistry, 10 units)
- CHEM 335A & 335B (Organic Chemistry, 6 units)
- CHEM 336A (Organic Chemistry Lab, 2 units)
- CHEM 445 (Structural Biochemistry, 3 units) OR CHEM 446 (Metabolic Biochemistry, 3 units)
- MATH 165 (Elementary Applied Statistics, 4 units)
- MATH 161 (Differential and Integral Calculus, 4 units)
- PHYS 210A & 210B (General Physics Lecture, 6 units)
- PHYS 209A (General Physics Lab, 1 unit)

Upper-Division Core in Biology (8)
- BIOL 320 (Evolution and Ecology, an Integrated Approach, 4 units)
- BIOL 321 (Molecular Biology, Cell Biology and Physiology, 4 units)

Organismal/Diversity Requirement (complete ONE of the following) (4)
- BIOL 322 (Invertebrate Biology, 4 units)
- BIOL 323 (Entomology, 4 units)
- BIOL 327 (Vertebrate Biology, 4 units)
- BIOL 329 (Plant Biology, 4 units)
- BIOL 340 (General Bacteriology, 4 units)

Upper-Division Requirements (9)
- BIOL 325 (Molecular and Cellular Lab Techniques, 1 unit)
- BIOL 342 (Molecular Genetics, 4 units)
- BIOL 344 (Cell Biology, 4 units)

Major Electives for Concentration (10)
Choose in consultation with your advisor

Recommended courses:
- BIOL 338 (Environmental Microbiology and Biotechnology, 4 units)
- BIOL 340 (General Bacteriology, 4 units)
  (if not used to satisfy the Organismal/Diversity Requirement)
- BIOL 383 (Virology, 4 units)
- BIOL 472 (Developmental Biology, 4 units)
- BIOL 480 (Immunology, 4 units)

Research Experience: (choose one of the following) (3)
- a. Research Experience in Biology
  BIOL 490 (3 units)
- b. Honors Thesis (enrollment by application only)
  BIOL 496A Honors Thesis I – Research Design (1-2 units)
  AND
  BIOL 496B Honors Thesis II (2-3 units)
- c. Independent Research
  BIOL 494 (1-3 units)

Total 78
GE (12 units in major) 36
Electives 6
Total Units in Degree 120

Recommended Advisors (in alphabetical order): Michael Cohen, Joseph Lin, Murali Pillai or Sean Place

Updated: 11/08/18