LOWER DIVISION REQUIREMENTS

Calculus: MATH 11A (FWS) ___ + 11B (FWS) ___
OR MATH 19A (FWS) ___ + 19B (FWS) ___

General Chemistry: CHEM 1A (FWS) ___ + 1B (FWS) ___ + 1C/N (FWS) ___

Biology: BIOL 20A (FWS) ___ + BIOE 20B (FWS) ___ + BIOE 20C (FWS) ___ + BIOL 20L* (FWS) ___
*Limited enrollment capacity for 2017-2018

Organic Chemistry: CHEM 8A/L (FWS) ___ + 8B (WS) ___

Statistics: AMS 5 (FWS) ___ OR 7/L (FWS) ___

Physics: PHYS 6A/L (FWS) ___ + 6B (WS) ___ OR PHYS 6A/L (FWS) ___ + 6C (FS) ___
OR PHYS 7A*(F)___+7B (W)___+6L (FWS)___ *Concurrent enrollment with PHYS 6L required
Note: PHYS 7A/B and 6L will not satisfy prerequisites for admission to most medical schools

UPPER DIVISION REQUIREMENTS

Biochemistry & Molecular Biology: BIOL 100 (FW) ___ + BIOL 101 (WS) ___
OR BIOC 100A (F) ___ + BIOC 100B (W) ___ + BIOC 100C (S) ___

Molecular Lab: BIOL 101L (WS) ___
*Students who complete BIOC 100ABC+ BIOL 101L have met the biochemistry & molecular biology/lab requirements.
In addition, BIOC 100C may be used to satisfy one lecture elective.

Genetics BIOL 105 (FWS) ___

Cell Biology: BIOL 110 (FS) ___

Electives: 15 credits of elective courses from the following list:

BIOL 111A Immunology I (W) ___
BIOL 111B Immunology II (-) ___
BIOL 112 Virology (3 units) (W) ___
BIOL 114 Cancer Cell Biology (S) ___
BIOL 115 Eukaryotic Molecular Biology (S) ___
BIOL 116 Advanced Topics in Cell Biology (3 units) (S) ___
BIOL 117 Global Health & Neglected Diseases (3 units)(W) ___
BIOL 120 Developmental Biology (W) ___
BIOL 125 Intro Neuroscience (FS) ___
BIOL 126 Advanced Molecualr Neuroscience (S) ___
BIOL 127 Mechanisms of Neurodegenerative Disease (-) ___
BIOL 128 Developmental Neurobiology (W) ___
BIOL 130/L Human Physiology (FW) (lab optional) ___
BIOL 178L Protocols in Stem Cell Biology (-) ___
BIOC 100C Biochemistry (S) ___
BIOE 109 Evolution (FWS) ___
BIOE 135/L Plant Physiology/Lab (F) ___
BME 110 Computational Biology Tools (FW) ___
BME 130 Genomes (F) ___
BME 155 Biotechnology & Drug Development (-) ___
BME 160/L Research Programming in the Life Sciences/Lab (WS) ___
BME 178 Stem Cell Biology (-) ___
METX 119 Microbiology (FS) ___
PHYS 180 Biophysics (S) ___

Laboratory: ONE from the following:

BIOL 100L Advanced Biochemistry Lab (-) ___
BIOL 105L Eukaryotic Genetics Lab (FWS) ___
BIOL 109L Yeast Molecular Genetics Lab (WS) ___
BIOL 115L Eukaryotic Molecular Biology Lab (FWS) ___
BIOL 120L Development Lab (W) ___
BIOL 121L Environmental Phage Biology Lab (S) ___
BIOL 186L Undergraduate Research in MCD (FWS) ___
BIOC 110L Advanced Biochemistry Lab (S) ___
METX 119L Microbiology Lab (FWS) ___

Qualification Policy:
Complete CHEM 1A, CHEM 1B, CHEM 1C, BIOL 20A, BIOL 20L, and BIOE 20B with grades of C or better. No more than one non-passing grade in the qualification courses is accepted. All qualification courses must be completed by the 6th quarter deadline.

DISCIPLINARY COMMUNICATION (DC): Satisfied by successful completion of the lab requirement
This requirement must be completed at UCSC.
Note: The Academic Advising Report may not reflect current DC requirements.
Check-in with a MCD Biology adviser about fulfilling this requirement.

COMPREHENSIVE REQUIREMENT (Senior Exit Requirement):
Satisfied by successful completion of the lab requirement
For more information about this requirement, visit:
http://undergrad.pbsci.ucsc.edu/mcdb/completing-the-major/senior-exit.html

*Course offerings are subject to change. Please refer to course offerings for updates:
https://undergrad.pbsci.ucsc.edu/enrollment/biol/catalog.php