MOLECULAR CELL & DEVELOPMENTAL BIOLOGY B.S. 2014-15

Name:__________________________ Date:__________________________ 
ID#:__________________________

(Quarter offered: F=Fall, W=Winter, S=Spring, (-)=Not offered this year)

NOTE: ALL courses on checklist MUST be taken for a letter grade

**INTRODUCTORY 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) ___

**Organic Chemistry:** CHEM 108A/L (FW) ___ + 108B (WS) ___

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

**Physics:** PHYS 6A/L (FWS) ___ + 6B (WS) ___ OR PHYS 6A/L (FWS) ___ + 6C (FS) ___

**ADVANCED REQUIREMENTS** (8 total including BIOL 101L and 1 additional lab)

**Biochemistry & Molecular Biology:** BIOL 100 (FW) ___ + BIOL 101 (WS) ___ + BIOL 101L/100K (FWS) ___  
OR  
BIOL 100A (F) ___ + BIOL 100B (W) ___ + BIOL 100C (S) ___ + BIOL 101L/100K (FWS) ___

**Genetics:** BIOL 105 (FWS) ___

**Cell Biology:** BIOL 110 (FS) ___

**Electives:** THREE from the following

Only ONE elective can be satisfied with a 3-unit elective

BIOL 111 Immunology (F) ___
BIOL 111A Immunology I (-) ___
BIOL 111B Immunology II (-) ___
BIOL 113 Mammalian Endocrinology (S) ___
BIOL 114 Cancer Cell Biology (S) ___
BIOL 115 Eukaryotic Molecular Biology (W) ___
BIOL 116 Advanced Topics in Cell Biology (3 units)(S) ___
BIOL 117 Neglected Tropical Diseases (3 units)(F) ___
BIOL 120 Developmental Biology (WS) ___
BIOL 125 Intro Neuroscience (W) ___
BIOL 126 Adv. Molecular Neuroscience (S) ___
BIOL 127 Neurodegenerative Disease (-) ___
BIOL 130/L Human Physiology (FW) (lab optional) ___
BIOL 140 Biophysics (S) ___
BIOL 178 Stem Cell Biology (W) ___
BIOL 178L Protocols in Stem Cell Biology (-) ___
BIOL 179 Biotechnology & Drug Development (W) ___
BIOL 180/L Programming for Biologists/Lab (S) ___
BIOL 181 Computational Biology Tools (FW) ___
BIOL 182 Genomes (FS) ___
BIOC 100C Biochemistry (S) ___
BIOE 109 Evolution (FW) ___
BIOL 135/L Plant Physiology/Lab (W) ___
METX 119 Microbiology (FW) ___

**Laboratory:** ONE from the following...

BIOL 100L Advanced Biochemistry Lab (FWS) ___
BIOL 105L Eukaryotic Genetics Lab (FW) ___
BIOL 105M Microbial Genetics Lab (-) ___
BIOL 109L Yeast Molecular Genetics Lab (F) ___
BIOL 110L Cell Biology Lab (-) ___
BIOL 115L Eukaryotic Molecular Biology Lab (FWS) ___
BIOL 120L Development Lab (W) ___
BIOL 121L Environmental Phage Biology Lab (-) ___
BIOL 186L Undergraduate Research in MCD (FWS) ___
BIOL 191L Advanced Biochemistry Lab (F) ___
METX 119L Microbiology Lab (FWS) ___

**Qualification Policy:**
Complete CHEM 1B, CHEM 1C, BIOL 20A, BIOE 20B with grades of C or better and cumulative GPA of 2.30 or higher. No more than one failing grade in the qual courses allowed.

**DISCIPLINARY COMMUNICATION:** Satisfied by successful completion of the lab requirement

NOTE: This requirement must be completed at UCSC.

**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