MCD BIOLOGY BS Requirements (2020-21)

*Course offerings are subject to change.

Lower Division Courses

Calculus: ☐ MATH 11A (FWS) **or** MATH 19A (FWS) **&** ☐ MATH 11B (FWS) **or** MATH 19B (FWS)

General Chem: ☐ CHEM 1A: General Chemistry (FWS) **&** ☐ CHEM 1B: General Chemistry (FWS) **&** ☐ CHEM 1C: General Chemistry & (FWS) ☐ CHEM 1N: General Chem Lab (FWS)

Biology: ☐ BIOL 20A: Cell and Molecular Bio (FWS) **&** ☐ BIOE 20B: Development and Physiology (FWS) **&** ☐ BIOE 20C: Ecology & Evolution (FWS) **&** ☐ BIOL 20L: Experimental Bio Lab (FWS) **OR** BIOL 102J: Toxic RNA Lab I (F)

Organic Chem: ☐ CHEM 8A: Organic Chemistry & (FW) ☐ CHEM 8L: Organic Chem Lab (FW) **&** ☐ CHEM 8B: Organic Chemistry (WS)

Statistics: ☐ STAT 5: Statistics (FWS) **OR** ☐ STAT 7: Stats for the Biological, Environmental, and Health Sciences & (FWS) ☐ STAT 7L: Stats Lab (FWS)

Physics: ☐ PHYS 6A: Introductory Physics I & (FWS) ☐ PHYS 6L: Introductory Physics I Lab (FWS) **&** ☐ PHYS 6B: Introductory Physics II (WS) **OR** ☐ PHYS 6C: Introductory Physics III (FS)

After passing the above qualification courses shaded green with a C or better, you can submit a Petition to Declare. All qualification courses must be completed by the end of the 5th quarter and students must petition to declare by the 6th quarter deadline.

☐ Declared

Upper Division Courses

Complete the major with the following:

CORE COURSES:

☐ BIOL 105: Genetics (FWS)

☐ BIOL 100: Biochemistry (WS) **&** ☐ BIOL 101: Molecular Biology (FS)

OR

☐ BIOC 100A: Biochemistry & Molecular Bio (F) **&** ☐ BIOC 100B: Biochemistry & MB (W) **&** ☐ BIOC 100C: Biochemistry & MB (S)

☐ BIOL 101L: Molecular Biology Lab (FWS) **OR** ☐ BIOL 102L: Toxic RNA Lab I (W)

☐ BIOL 110: Cell Biology (FW)

ELECTIVES: 3 UPPER DIVISION ELECTIVES (ONLY ONE OF WHICH MAY BE A 3-UNIT COURSE: BIOL 112 or 116)

☐ BIOC 100C: Biochemistry
☐ BIOE 109: Evolution
☐ BIOE 135/L: Plant Physiology/Lab
☐ BIOL 111A: Immunology
☐ BIOL 111B: Immunology
☐ BIOL 112: Virology
☐ BIOL 114: Cancer Cell Biology

- [ ] BIOL 115: Eukaryotic Molecular Biology
- [ ] BIOL 116: Advanced Topics in Cell Biology
- [ ] BIOL 117: Global Health & Neglected Diseases
- [ ] BIOL 118: Principles of Human Genetics
- [ ] BIOL 120: Developmental Biology
- [ ] BIOL 125: Intro to Neuroscience
- [ ] BIOL 126: Advanced Molecular Neuroscience
- [ ] BIOL 127: Mechanisms of Neurodegenerative Diseases
- [ ] BIOL 128: Developmental Neurobiology
- [ ] BIOL 130: Human Physiology
- [ ] BIOL 140: The RNA World
- [ ] BME 110: Computational Biology Tools
- [ ] BME 130: Genomes
- [ ] BME 160: Research Programming for Biologists & Biochemists
- [ ] BME 178: Stem Cell Biology
- [ ] METX 119: Microbiology
- [ ] PHYS 180: Biophysics

LAB: 1 LAB COURSE REQUIRED

- [ ] BIOL 100L: Biochemistry Lab
- [ ] BIOL 103L: Toxic RNA Lab II
- [ ] BIOL 105L: Eukaryotic Genetics Lab
- [ ] BIOL 106L: Eukaryotic Genetic Engineering Lab
- [ ] BIOL 109L: Yeast Molecular Genetics Lab
- [ ] BIOL 115L: Eukaryotic Molecular Biology Lab
- [ ] BIOL 120L: Developmental Biology Lab
- [ ] BIOL 121L: Environmental Phage Biology Lab
- [ ] BIOL 186L: Undergraduate Research in MCD Biology
- [ ] METX 119L: Microbiology Lab

DISCIPLINARY COMMUNICATION & SENIOR EXIT REQUIREMENTS ARE SATISFIED BY COMPLETING ONE 5-UNIT LAB COURSE FROM THE ABOVE LIST.

- [ ] DC/SENIOR EXIT COMPLETE

Please refer to your 2020-21 UCSC General Catalog for more information or clarification