# Neuroscience BS Requirements (2022-23)

Lower Division Requirements

**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)
- BIOL 20B: Development and Physiology (FWS)
- BIOL 20L: Experimental Bio Lab (FWS)

**Organic Chem:**
- CHEM 8A: Organic Chemistry (FWS)
- CHEM 8B: Organic Chemistry (WS)
- BIOL 102J: Toxic RNA Lab I (F)
- CHEM 8L: Organic Chem Lab (FW)
- BIOL 107J: Synthetic Gene Regulation Lab I (F)

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

**Physics:**
- PHYS 6A: Introductory Physics I & (FWS)
- PHYS 6B: Introductory Physics II (WS)
- PHYS 6C: Introductory Physics III (FS)

After passing the above qualification courses shaded green with a C or better, you can submit your request to declare your major via your my.ucsc.edu portal. 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 Requirements

Complete the major with the following:

**CORE COURSES:**
- BIOL 105: Genetics (FWS)
- BIOL 100: Biochemistry (WS)
- BIOL 101: Molecular Biology (FS)
- BIOC 100A: Biochemistry & Molecular Bio (F)
- BIOC 100B: Biochemistry & MB (W)
- BIOC 100C: Biochemistry & MB (S)
- BIOL 101L: Molecular Biology Lab (FWS)
- BIOL 102L: Toxic RNA Lab II (W)
- BIOL 107L: Synthetic Gene Regulation Lab II (W)
- BIOL 125: Introduction to Neuroscience (FW)
- BIOL 126: Advanced Molecular Neuroscience (S)
- BIOL 128: Developmental Neurobiology (S)

**UPPER DIVISION ELECTIVES: CHOOSE AT LEAST 1**
- BIDE 131: Animal Physiology
- BIOE 131L: Animal Physiology Lab
- BIOL 110: Cell Biology
- BIOL 114: Cancer Cell Biology
- BIOL 115: Eukaryotic Molecular Biology
- BIOL 118: Principles of Human Genetics
- BME 110: Computational Biology Tools
- BME 130: Genomes
- BME 160: Research Programming for Biologists & Biochemists
- PHYS 180: Biophysics
- PSYC 121: Perception
- PSYC 123: Cognitive Neuroscience

**LAB: LAB COURSE REQUIRED**
- BIOL 129L: Neurobiology Lab
- BIOL 129A: Advanced Topics in System Neuroscience
- BIOL 129B: Advanced Topics in Developmental Neurobiology

**DISCIPLINARY COMMUNICATION & COMPREHENSIVE REQUIREMENTS ARE SATISFIED BY COMPLETING 129L**
- DC/COMPREHENSIVE REQUIREMENT COMPLETE

Please refer to your 2022-23 UCSC General Catalog for more information or clarification.