**Neuroscience and Behavior B.S. major requirements**

**Requirements for Bulletin/academic years 2019-20 and beyond**

Prerequisites:

 Intro Psych PSY 10000 (University Core 5 or AP credit)

Required:

BIOS: Molecules to Ecosystems with lab (BIOS 10172/11174)

NSBH Core 1: Systems Neuroscience (NSBH/SC 20450 and 21450)

NSBH Core 2: Intro to Cognitive Neuroscience (NSBH/PSY 30520)

NSBH Core 3: Molecular Neuroscience (NSBH/CHEM30301)

Perspectives on the NSBH major (NSBH 20010)

Foundational Science Electives, 3 courses (min. 9 credits)

BIOS: Big Questions w/ lab BIOS 10171/11173

Genetics BIOS 20250/21250 (taken together) or 20303 Cell Biology BIOS 20241 or 30341

Biocomputing BIOS 30318 with 32318

Biochemistry CHEM 40420

Scientific computing ACMS 20210

Intro Appl Math Methods I ACMS 20550

Intro Dynamical Syst for Sci MATH 20480

Intro to Math Reasoning MATH 20630

Exp Psych II: Research Methods PSY 30160

One Additional Laboratory course (associated lecture required)

 Genetics, cellular biology, physiology, or anatomy accepted

Statistics, choose one:

Psychology statistics PSY 30100

Biostatistics BIOS 40411

 \*Biological Science electives, 6 cr

Human Physiology BIOS 30344

Animal Behavior BIOS 30407

Embryology BIOS 30301

Cellular Neurobiology BIOS 30410

Advanced Neurobiology BIOS 30338

Sex Diff in Brain & Behav NSBH 40200

Developmental Neuroscience BIOS 40202

Human Gross Anatomy BIOS 40339

Neuroinfectious Disease BIOS 40203

Neuroendocrinology NSBH 40300

Clinicl Resrch Rare Neglct Dis BIOS 40450/60565

Intro to Mol and Med Pharma BIOS 40436

Topics in Physiology BIOS 60571 (Li, Duffield)

Behavioral Ecology BIOS 60552 (Archie)

\*Psychological Science electives, 6 cr

Cognitive psych PSY/NSBH 30400

Sensation perception PSY/NSBH 30440

Learning and Memory PSY/NSBH 30430

Abnormal psychology PSY/NSBH 30310

Adolescent development PSY/NSBH 30220

Developmental psychology PSY/NSBH 30200

Cognitive Aging PSY/NSBH 33528

The sleeping brain PSY/NSBH 43562

Intro to quant neuroscience PSY/NSBH 40126

Cognition & Emotion PSY/NSBH 43308

Mental Health and Aging PSY/NSBH 43230

Stress, Disease and Disorders PSY/NSBH 43318

Cognitive Development PSY/NSBH 43250

 \*Additional Elective Requirements, 12 cr
Free choice among bio and psych electives already listed above as well as additional coursework opportunities in other departments as listed below:

Fundamentals of Bio Anthro ANTH 20201

Human Ethology ANTH 20105 (Hum. Kind Unpl. ANTH 10209)

Paleo Parenting ANTH 20304

Infancy: History, Dev, Evo ANTH 30190

Primate Behavior & Ecology ANTH 35110

Evolution/Med Persp Fatherhood ANTH 40120

Advanced Human Ethology ANTH 43310

Comput & Mathematical Neurosci ACMS 40740

Artificial Neural Networks ACMS 4XXXX

Neuropharmacology CHEM/NSBH 40404

Chemistry in Service of Community CHEM 30331

Brian Health Comm-Eng Research CSC/NSBH 45000

Summer Service Learning Program:

 Plasticity and Compassion CSC/NSBH 33939

Physics of Cells PHYS 50401

Philosophy of Mind PHIL 43901

Minds, Brains, Persons PHIL 20208

In addition to the above coursework, up to 6 credits of undergrad research w/approved faculty advisers can be earned toward Additional Electives

\*Course offerings are updated regularly. This list list updated in Spring 2019.