

## Neuroscience and Behavior B.A. Major Requirements

**Total Credits: 63**

**Prerequisite Credits: 23**

**Major Credits: 40**

### Prerequisites: (23 credits)

Intro Psych PSY 10000 or 2000 (University Core 5 or AP credit)  
Calculus I MATH 10350 or 10550 (Can count towards the University Core 1)  
General Chemistry I & Lab CHEM 10171/11171 (Can count towards the University Core 2)  
Organic Chemistry I & Lab CHEM 10172/11172(Can count towards the University Core 3)  
BIOS: Big Questions (BIOS 10171) & Lab (BIOS 11173)  
BIOS: Molecules to Ecosystems (BIOS 10172) & Lab (BIOS 11174)

### Required Core: (19 credits)

NSBH Core 1: Systems Neuroscience (NSBH/SC 20450 and 21450) & Lab  
NSBH Core 2: Intro to Cognitive Neuroscience (NSBH/PSY 30520)  
NSBH Core 3: Molecular Neuroscience (NSBH/CHEM30301)  
Perspectives on the NSBH major (NSBH 20010)  
Psychology Statistics (PSY 30100)  
PSY Research Methods (PSY 30160)

### Biological Science Electives: (2 courses/6 credits minimum)

Human Physiology	BIOS 30344
Animal Behavior	BIOS 30407
Embryology	BIOS 30301
Cellular Neurobiology	BIOS 30410
Advanced Neurobiology	BIOS 30338
Developmental Neuroscience	BIOS 40202
Human Gross Anatomy	BIOS 40339
Neuro-infectious Disease	BIOS 40203
Clinical Research Rare Neglct Diseases	BIOS 40450/60565
Intro to Mol and Med Pharma	BIOS 40436
Topics in Neuro: Neuroendocrinology	BIOS 60572
Topics in Neuro: Sex Diff in Brain & Behav	BIOS 60572
Topics in Physiology	BIOS 60571 (Li, Duffield)
Behavioral Ecology	BIOS 60552 (Archie)

Psychological Science Electives: (2 courses/6 credits minimum)

Cognitive Psychology	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
Neurodevelopmental disorders: ADHD	PSY/NSBH 43451
The sleeping brain	PSY/NSBH 43562
Intro to quant neuroscience	PSY/NSBH 40126
Food and the Brain	PSY/NSBH 43357
Cognition & Emotion	PSY/NSBH 43308
Language Development	PSY/NSBH 43251
Mental Health and Aging	PSY/NSBH 43230
Cognitive Development	PSY/NSBH 43250

Additional Elective Requirements: (3 courses/9 credits minimum)

Free choice among bio and psych electives already listed above as well as additional coursework opportunities in other departments. Up to 6 credits of undergrad research w/approved faculty advisers can be earned toward Additional Electives.

Fundamentals of Bio Anthropology	ANTH 20201
Human Ethology	ANTH 20105 (Hum. Kind Unpl. ANTH 10209)
Advanced Human Ethology	ANTH 43310
Primate Behavior & Ecology	ANTH 35110
Evolution/Med Perspectives Fatherhood	ANTH 40120
Infancy: History, Development, Evolution	ANTH 30190
Computational & Mathematical Neuroscience	ACMS 40740
Artificial Neural Networks	ACMS 4XXXX
Neuropharmacology	CHEM/NSBH 40404
Chemistry in Service of Community	CHEM 30331
Brain Health Comm-Eng Research	CSC/NSBH 45000
Physics of Cells	PHYS 50401
Philosophy of Mind	PHIL 43901
Minds, Brains, Persons	PHIL 20208
Summer Service Learning Program: Plasticity and Compassion	CSC/NSBH 33939

**BA NSBH Major Sample Curriculum**

<b><u>First Year Fall</u></b>		<b><u>First Year Spring</u></b>	
BIOS: Big Questions & Lab		BIOS: Molecules to Ecosystems & Lab	
Gen Chem I & Lab		Orgo Chem I & Lab	
Intro Psychology			
<b><u>Sophomore Year Fall</u></b>		<b><u>Sophomore Year Spring</u></b>	
NSBH CR1: Systems Neuro & Lab		NSBH CR3: Mol Neuroscience	
NSBH CR2: Intro to Cog Neuro		Psychology Statistics	
Calculus I		Foundational Science Elective	
Perspectives on the NSBH Major			
<b><u>Junior Year Fall</u></b>		<b><u>Junior Year Spring</u></b>	
Psychological Science Elective (1)		Additional Elective (1)	
Biological Science Elective (1)		Biological Science Elective (2)	
Psychology Res Methods			
<b><u>Senior Year Fall</u></b>		<b><u>Senior Year Spring</u></b>	
Additional Elective (2)		Psychological Science Elective (2)	
		Additional Elective (3)	