FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROC Undergraduate Department <sup>N/A</sup>	GRAM REQUEST Programs	UUPC Approval <u>10/7/24</u> UFS Approval Banner Catalog
Program Name	• Wilkes Honors College	New Program*	Fffective Date
Concentration in Neuroscience		Change Program*	(TERM & YEAR) Spring 2025
Add PCB3411 Ho	onors Animal Behavior to the Neuroso	cience concentration as Cellu	lar Neuroscience elective.
*All new programs a Faculty Contact/ Erik Duboue, edubor	ind changes to existing programs must be a E <b>mail/Phone</b> ue@fau,edu, 561-799-8054	accompanied by a catalog entry sh Consult and list departmen change(s) and attach docu N/A	nowing the new or proposed changes. nts that may be affected by the mentation
Approved by Department Chair College Curriculur College Dean ( UUPC Chair ( Undergraduate Struur) Undergraduate Struur) Provost ( )	n Chair <u>Ievje</u> Rill June Korey Sorge udies Dean Dan Meeroff		Date 9/13/2024 9-13-2024 9/13/24 10/7/24 10/7/24

 $\label{eq:constraint} {\sf Email this form and attachments to } \underline{mjenning@fau.edu} \ {\sf seven business days before the UUPC meeting.}$ 

FAUprogramchangeUG, revised Fall 2019

# CONCENTRATION IN NEUROSCIENCE

Students must earn a "C" or better in each course taken to fulfill a concentration requirement.

## Advisory Board:

Dr. Lucia Carvelli | Dr. Erik Duboue | Dr. Julie Earles | Dr. Kevin Lanning | Dr. Laura Vernon

Neuroscience students study the molecular, cellular, structural, and functional aspects of the nervous system. Neuroscience is an interdisciplinary field of study that combines biology, psychology, chemistry, and other fields in an attempt to understand how the nervous system works. The neuroscience concentration will lead students through the fundamentals of the field, spanning the breadth from molecular signaling to human cognition and behavior. The core curriculum will give students the base knowledge necessary to explore the interdisciplinary field. The concentration is composed of two tracks—(1) Cellular Neuroscience and (2) Neuroscience, Cognition, and Behavior--each designed to meet the needs of students with diverse interests while providing rigorous, multidisciplinary preparation for medical school and graduate programs in areas such as neuroscience, biology, psychology, and behavioral medicine.

## There are two tracks:

<u>Track one: Cellular Neuroscience</u> <u>Track Two: Neuroscience, Cognition, and Behavior</u>

Courses

## TRACK ONE NEUROSCIENCE - CELLULAR NEUROSCIENCE

Course#	Course Title
NEURO CORE	
PSY 1012	Honors General Psychology
BSC 1010	Honors Biological Principles
BSC 1010L	Honors Biological Principles Lab
BSC 1011	Honors Biodiversity
BSC 1011L	Honors Biodiversity Lab
PCB 3703	Honors Human Morphology 1
PCB 3703L	Honors Morphology and Function 1 Lab
CHM 2045	Honors General Chemistry 1
CHM 2045L	Honors General Chemistry 1 Lab
CHM 2046	Honors General Chemistry 2
CHM 2046L	Honors General Chemistry 2 Lab
STA 2023	Honors Statistics

Course#	Course Title
IDS 4970	Honors Thesis (two semesters)

## ADDITIONAL REQUIRED COURSES

Course#	Course Title
MAC 2311	Honors Calculus 1
MAC 2312*	Honors Calculus 2
CHM 2210	Honors Organic Chemistry 1
CHM 2210L	Honors Organic Chemistry 1 Lab
CHM 2211	Honors Organic Chemistry 2
CHM 2211L	Honors Organic Chemistry 2 Lab
PHY 2048	Honors General Physics 1
or PHY 2053	or Honors College Physics 1
PHY 2048L	Honors General Physics 1 Lab
PHY 2049*	Honors General Physics 2
or PHY 2054	or College Physics 2
PHY 2049L	Honors General Physics 2 Lab
BCH 3033	Honors Biochemistry
PCB 3063	Honors Genetics
PCB 4102	Honors Cell Biology
	Cellular Neuroscience Electives (selected from list below)
	TOTAL 74-78

\*Students may substitute College Physics II (PHY 2054), in which case MAC 2312 would not be required. But Calculus-based Physics is highly recommended.

Course#	Course Title
PCB 4843C	Practical Cell Neuroscience
ZOO 4742	Honors Principles of Human Neuroanatomy
BSC 4905	Honors Neuroscience Journal Club
BSC 4930	Honors CRISPR Tech Lab
BSC 4930	Honors Developmental Neurobiology
BSC 4930	Honors Neurophysiology
BSC 4930	Honors Sensory Systems
BSC 4930	Honors Systems Neuroscience
MCB 3020/L	Honors Microbiology and Lab
PCB 3411	Honors Animal Behavior
PCB 4024	Honors Molecular Cell Biology
PCB 4233	Immunology
PCB 4253	Honors Developmental Biology
PCB 4832C	Neurophysiology

## CELLULAR NEUROSCIENCE ELECTIVES (SELECT 3)

Course#	Course Title
PSB 3340	Honors Behavioral Neuroscience
PSB 3441	Honors Drugs and Behavior (psychopharmacology)
PSB 4243	Honors Neuroscience of Addiction
PCB 4841	Honors Cellular Neuroscience
BSC 4915	Honors Directed Independent Research in Biology

Note: Students in the Max Planck Honors Program may count Introduction to Neuroscience Research (PSB 4003, 1 credit) and two distinct MPHP Enrichment courses (1 credit each) as their 3 credit, Neuroscience elective.