

Bachelor of Science with Major in Neuroscience and Behavior

(Minimum of 120 credits required)

The B.S. degree in Neuroscience and Behavior is administered jointly by the Department of Psychology and the Department of Biological Sciences. The Neuroscience and Behavior program provides undergraduate preparation for students interested in pursuing graduate degrees in behavioral neuroscience, neurobiology and/or behavioral biology, or in pursuing professional degrees in medicine or veterinary medicine. Qualified students are strongly encouraged to become involved in neuroscience and behavior research projects (normally via a Directed Independent Study, Directed Independent Research or special research course). An optional Honors Thesis, PSY 4970, is available to those students who meet the academic requirements. A grade of "C-" or better (unless otherwise noted in the course description) is required in all psychology, **biology** and cognate courses taken as part of the requirements for a B.S. with major in Neuroscience and Behavior. However, students must maintain a "C" average in departmental major courses.

Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the *Transition Guides*.

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.



In addition to the University and College requirements, students are expected to complete all of the following courses. A minimum of 24 of the upper-division credits in the B.S. Neuroscience and Behavior program must be taken at Florida Atlantic University.

Core Requirements

Biological Principles	BSC 1010	3
Biological Principles Lab	BSC 1010L	1
Biodiversity	BSC 1011	3
Biodiversity Lab	BSC 1011L	1
Comparative Animal Behavior	CBH 4024	3
General Chemistry 1	CHM 2045	3
General Chemistry 1 Lab	CHM 2045L	1
General Chemistry 2	CHM 2046	3
General Chemistry 2 Lab	CHM 2046L	1
Math through Calculus	MAC 2233, 2281, 2282, 2311, 2312 or 2313	3
Genetics	PCB 3063	4
Organic Chemistry 1 and 2 or	CHM 2210 and CHM 2211	6
General Physics 1 and 2* or College Physics 1 and 2*	PHY 2048 and PHY 2049 or PHY 2053 and PHY 2054	6 8
Organic Chemistry Lab	CHM 2211L	2
Biochemistry	BCH 3033	3
Biological Bases of Behavior 1	PSB 3002	3

General Psychology	PSY 1012	3
Research Methods in Psychology	PSY 3213	3
Experimental Design and Statistical Inference	PSY 3234	3
Intermediate Statistics Lab	STA 3163L	1

* This degree program does not require that students take Physics lab courses. However, students considering medical school should take the lab sequences. The Physics Department may require labs as corequisites for lecture courses.

Elective Requirements (Changes effective spring 2020.)

Students are expected to complete a minimum of 12 credits of elective courses. Students are free to choose their elective courses from those listed below. ~~Special Topics laboratory courses with the words "Research in (neuroscience-related topic)" or "Laboratory in (neuroscience-related topic)" can be substituted for one elective course, with permission of the program coordinator.~~

Behavioral Neuroscience		
Cognition	EXP 3505	3
Auditory Perception	EXP 4120	3
Human Perception	EXP 4204	3
Practical Cell Neuroscience	PCB 4843C	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Laboratory in Psychobiology	PSB 4004L	3
Biological Bases of Behavior II	PSB 4006	3
Neuropsychology	PSB 4240	3
Human Psychophysiology	PSB 4323	3
Psychopharmacology	PSB 4444	3
Developmental Psychobiology	PSB 4504	3
Neurobiology of Learning and Memory	PSB 4810	3
Biopsychology of Language	PSB 4833	3
Special Topics*	BSC 4930	1-3
Special Topics*	PSY 4930	1-3
Special Topics in Neuroscience and Behavior*	PSB 4930	3
Developmental Neurobiology	PSB 6515	3
Principles of Human Neuroanatomy	ZOO 4742	3
Directed Independent Research in Neuroscience and Behavior**	PSB 4915	1-3
Directed Independent Research in Neuroscience and Behavior**	PSB 4917	0-3

Cellular Molecular Neuroscience		
Biochemistry ***	BCH 3033	3
Organic Chemistry Lab ****	CHM 2211L	2
Cellular Neuroscience and Disease	PCB 4842	3
Practical Cell Neuroscience	PCB 4843C	3

Human Morphology and Function 1	PCB 3703	3
Human Morphology and Function 1 Lab	PCB 3703L	1
Human Morphology and Function 2	PCB 3704	3
Human Morphology and Function 2 Lab	PCB 3704L	1
Cell Biology	PCB 3023	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Neurobiology of Learning and Memory	PSB 4810	3
Special Topics*	BSC 4930	1-3
Special Topics*	PSY 4930	1-3
Special Topics in Neuroscience and Behavior*	PSB 4930	3
Directed Independent Research in Neuroscience and Behavior**	PSB 4915	1-3
Directed Independent Research in Neuroscience and Behavior**	PSB 4917	0-3

<i>Ethology/Comparative Psychology</i>		
Psychology of Motivation	EXP 4304	3
Marine Biology	OCB 4043	2
Marine Biology Field Studies and Lab	OCB 4043L	2
Principles of Ecology	PCB 4043	3
Evolution	PCB 3674	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Computer Laboratory in Psychobiology	PSB 3002L	3
Laboratory in Psychobiology	PSB 4004L	3
Developmental Psychobiology	PSB 4504	3
Invertebrate Zoology	ZOO 2203	3
Invertebrate Zoology Lab	ZOO 2203L	2
Functional Biology of Marine Animals	ZOO 4402	3
Functional Biology of Marine Animals Lab	ZOO 4402L	1
Ornithology	ZOO 4472	2
Ornithology Lab	ZOO 4472L	2
Vertebrate Structure Development and Evolution	ZOO 4690	3
Vertebrate Structure and Development Lab	ZOO 4690L	2
Special Topics*	BSC 4930	1-3
Special Topics*	PSY 4930	1-3
Special Topics in Neuroscience and Behavior*	PSB 4930	3
Directed Independent Research in Neuroscience and Behavior**	PSB 4915	1-3
Directed Independent Research in Neuroscience and Behavior**	PSB 4917	0-3

<i>Upper Division Honors Program in Psychology Sequence***</i>

Honors Seminar	PSY 4932	3
Honors Critical Questions in Psychology	PSY 4935	3
Honors Thesis	PSY 4970	1-3

* Applies to Special Topics courses that are relevant to the neurosciences. Interested students should confirm with the B.S. degree program faculty advisors.

** Maximum of 3 credits of Directed Independent Research may be counted as an elective for the major.

*** Enrollment is limited to students in the Psychology Honors Program.

~~*** CHM 2210 and CHM 2211 are prerequisites for BCH 3033.~~

~~**** CHM 2210 is a prerequisite for CHM 2211L.~~