**Bachelor of Science with Major in Neuroscience and Behavior**
*(Minimum of 120 credits required)*

The Neuroscience and Behavior major provides undergraduate preparation for students interested in pursuing graduate degrees in psychobiology, neuroscience 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 or special research course). An optional Honors Thesis, PSY 4970, is available to those students who meet the academic requirements.

**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 [*Transfer Student Manual*.](http://www.fau.edu/registrar/registration/transfer.php)

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.

[](http://www.fau.edu/academic/registrar/PREcatalog/science.php#topofpage)
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**

|  |  |  |
| --- | --- | --- |
| Biochemistry 1 | BCH 3033 | 3 |
| 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 |
| Organic Chemistry 1 | CHM 2210 | 3 |
| Organic Chemistry 2 | CHM 2211 | 3 |
| Organic Chemistry Lab | CHM 2211L | 2 |
| Math through Calculus | MAC 2233, 2281, 2282, 2311, 2312 or 2313 | 3 |
| Genetics | PCB 3063 | 4 |
| General Physics 1 and 2\* **or**College Physics 1 and 2\* | PHY 2048 and PHY 2049 **or**PHY 2053 and PHY 2054 | 8 |
| 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**
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*** |
| Auditory Perception | EXP 4120 | 3 |
| Human Perception | EXP 4204 | 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 |
| 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 |
| Developmental Neurobiology | PSB 6515 | 3 |

|  |
| --- |
| ***Cellular Molecular Neuroscience*** |
| 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 |

|  |
| --- |
| ***Ethology/Comparative Psychology*** |
| 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 |
| Comparative Vertebrate Morphogenesis | ZOO 4690 | 3 |
| Comparative Vertebrate Morphogenesis Lab | ZOO 4690L | 2 |

**The FAU Max Planck Honors Program (MPHP)**

For students pursuing the FAU Max Planck Honors Program (FAU MPHP), six (6) of the elective credits in their major/concentration must be applied toward the requirements of the FAU MPHP. These include successful completion of a Capstone experience (minimum of three (3) credits), and three (3), different MPHP Enrichment courses (1 credit each) from those listed below. A minimum grade of B must be achieved in graded courses (S in non-graded courses) among these exclusive MPHP course options for them to count towards the requirements of the FAU MPHP.

The following MPHP Enrichment courses list will be added under the electives section. These courses are exclusively available to FAU MPHP students:

|  |
| --- |
| **FAU Max Planck Honors Program Required Coursework** |
|  |
| **CORE course** *(Required for all participants*) |
| Introduction to Neuroscience Research | PSB 4003 | 1 |
|  |
| ***ENRICHMENT Course Electives*** *(At minimum, two different courses are required)* |
| Directed Independent Research | PSB 4916 | 0-3 |
| Max Planck Seminar | PSB 4932 | 1 |
| Journal Club in Neuroscience | PSB 4951 | 1 |
| Adv Techniques in Neurosci Res | PSB 4112C | 1 |
| Advanced Physiology | PCB 4701C | 1 |
| Adv Cell Imaging for Neurosci | PCB 4503C | 1 |
| Symposium Presentation | PSB 4922 | 1 |
| Scientific Communication | BSC 4842 | 1 |
| Advanced Genetics | PCB 4066 | 1 |
| Adv Scientific Grant Writing | PCB 4956 | 1 |
| Special Topics in Neuroscience | PSB 4931 | 1 |
|  |
| ***CAPSTONE Options*** *(At least three credits in one of the following is required)* |
| Honors THESIS | PSB 4970 | 1-3 |
| Honors MENTORED LAB RESEARCH | PSB 4903 | 1-3 |
| Honors ALTERNATIVE CAPSTONE (\*requires approval) | PSB 4902 | 1-3 |

**Applied Mental Health Services Certificate**
The undergraduate certificate in Applied Mental Health Services, offered jointly by the Department of Psychology and by the Department of Counselor Education in the College of Education, provides a curricular experience for students who wish to pursue careers in clinical psychology, mental health counseling and allied human services that enhances the student's chosen major. This program is also specialized training for students who wish to pursue graduate degrees in these critical-need careers.

Students who have completed 60 credits with a GPA of 3.0 or better may apply for the certificate program. The program requires a minimum of 15 credits by completing the psychology and counselor education courses below. Students must attain a 3.0 GPA or better to qualify for the certificate. Students who qualify will receive a certificate of completion and a notation on their transcript.

|  |
| --- |
| **Required Courses (15 credits)** |
| Clinical Psychology | CLP 4343 | 3 |
| Neuropsychology | PSB 4240 | 3 |
| Psychology and the Law | SOP 4751 | 3 |
| Career and Lifespan Development | SDS 3340 | 3 |
| Interpersonal Communication Skills | SDS 4410 | 3 |