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| **Entrance Requirements -** To apply you must already have a grade of C- or higher in: | | | | |
| BSCI170/171 | |  | | Principles of Biology (formerly BSCI105) |
| CHEM131/132 | | |  | Fundamentals of General Chemistry |
|  | NEUR200/  PSYC202 |  | | Introduction to Neuroscience |

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| **Five Required Courses** (one from each group A-E) | | | | Prerequisites |
| **A** | PSYC300 |  | Research Methods | PSYC100, PSYC200 |
| **B** | NEUR405 |  | Neurobiology Lab (4) | NEUR306 or BSCI353; PHYS132 |
| PSYC407 |  | Behavioral Neurobiology Laboratory (4) | NEUR200/PSYC202, PSYC300 |
| PSYC417 |  | Data Science for Psychology and Neuroscience Majors (4) | PSYC200, PSYC300,  MATH120 or 130 or 140 |
|  | PSYC304 |  | Biological Psychology | PSYC100, BSCI170 & BSCI171 |
| **C** | PSYC406 |  | Neuroethology (3) | NEUR200/PSYC202 |
| BSCI446 |  | Neural Systems (3) | BSCI353 or NEUR306 |
| **D** | PSYC403 |  | Animal Behavior (3) | PSYC100, NEUR200/PSYC202 |
| PSYC302 |  | Fundamentals of Learning and Behavior (3) | PSYC100, BSCI170 & 171 |
| BSCI 360 |  | Principles of Animal Behavior (3) | BSCI160 & 161 or BSCI106, BSCI170 & 171 or BSCI105, BSCI222 |
| **E** | PSYC409 |  | Topics in Neuroscience Seminar (1) | Permission of Instructor & Department |

**No more than 2 courses can count towards both the minor and your major**

***Check Testudo for current prerequisites***

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| **Elective Courses** (2 courses for 6-8 credits) | | | | Prerequisites |
| BSCI338 |  | Special Topics Courses in Biology | | By Permission Only |
| BSCI440 |  | Mammalian Physiology | | BSCI330, CHEM231/232 |
| CMSC421 |  | Introduction to Artificial Intelligence | | CMSC351, CMSC330 & Permission of Department |
| HESP300 |  | Intro to Psycholinguistics | | HESP202 or Permission of Department |
| HESP305 |  | Anatomy & Physiology of the Speech Mechanism | | HESP202 or Permission of Department |
| HESP311 |  | Anatomy, Pathology & Physiology of the Auditory System | | HESP202 or Permission of Department |
| HESP407 |  | Bases of Hearing Science | | HESP311 or Permission of Department |
| HESP422 |  | Neurological Bases of Human Communications | | HESP305 or Permission of Department |
| KNES385 |  | Motor Control and Learning | | BSCI201, MATH113, & Permission of Department |
| KNES445 |  | Exercise & Brain Health | | KNES350 |
| KNES462 |  | Neural Basis of Human Movement | | BSCI201/202, KNES385 |
| LING240 |  | Language and Mind | | LING200 |
| NEUR305 |  | Neural Systems and Circuits | | MATH120, NEUR200/PSYC202 or BSCI353 |
| NEUR306 |  | Cellular and Molecular Neuroscience | | NEUR200/PSYC202 or BSCI330, prior or concurrent enrollment in PHYS132 |
| PSYC207/PSYC307 |  | Collective Behavior and Decision-Making in Human and Animal Groups | | NEUR200/PSYC202, PSYC304 or PSYC221 |
| PSYC210 |  | Personality and Temperament: Developmental Origins, Brain Bases, and Clinical Implications | | PSYC100 |
| PSYC304 |  | Biological Psychology | | PSYC100, BSCI170/ BSCI171 |
| PSYC310 |  | Perception | | PSYC100. CHEM103 or PHYS121 or BSI160/161 or BSCI170/171 or BSCI105 or BSCI106 |
| PSYC341 |  | Introduction to Memory and Cognition | | PSYC200 & PSYC300 |
| PSYC404 |  | Neuropharmacology | | NEUR200/PSYC202 |
| PSYC411 |  | Introduction to Functional Magnetic Resonance Imaging | | PSYC200, NEUR200/PSYC202 & PSYC300 |
| PSYC414 |  | Science of Sleep and Biological Rhythms | | PSYC301, PSYC202/NEUR200 |
| PSYC417 |  | Data Science for Psychology and Neuroscience Majors | | PSYC200, PSYC300, MATH120 or MATH140 or MATH136 |
| PSYC440 |  | Experimental Psychology: Cognitive Processes | | PSYC100, PSYC200, PSYC300, & PSYC341 |
| PSYC442 |  | Psychology of Language | PSYC300 & PSYC341 | |
| PSYC489G |  | Hormones and Behavior | | BSIC330, NEUR200/PSYC202 |
| PSYC489R |  | Human and Animal Intelligence | | PSYC100 & PSYC300 |

Additional courses may be considered for elective credit – consult with the Neuroscience faculty advisor.

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| **Elective Graduate Courses** | | | Permission of Instructor, Department & College Required | |
| NACS641 |  | Introduction to Neurosciences (4) | |  |
| NACS642 |  | Cognitive Neuroscience | |  |
| NACS643 |  | Computational Neuroscience | |  |
| NACS644 |  | Cellular and Molecular Neuroscience | |  |
| NACS728Y |  | Introduction to Cognitive Science | |  |
| PSYC764 |  | Comparative Neuroanatomy | |  |

Undergraduate students pursuing a minor in neurosciences must complete a "Permission to Enroll in a Graduate class" form and obtain all of the required signatures in order to enroll in a graduate class (500-700 level). Students can get permission for a graduate-level class on a case-by-case basis with the approval of the instructor, advisor, department, and college offering the course. Each college has a form for this purpose.

**Research Opportunities**

**Research Assistantships** - Student may have the opportunity to participate as a research assistant in a neurosciences laboratory for an elective (e.g. BSCI 399, PSYC 479). Must be an independent research project. Permission of Minor in Neurosciences Faculty Advisor is required.

**Honors Thesis** - A student in a Departmental Honors Program may conduct a thesis in Neurosciences for their program’s requirement. Consult with a faculty advisor for more information.

**Applying to the Minor in Neuroscience**

Visit <https://go.umd.edu/NeuroscienceMinor> to download the application.