**Interdisciplinary Minor in Neuroscience**

Departments of Psychology & Biology

Program Requirements & Recommendations for Psychology Majors

(Note: Guide for Biology Majors may be obtained in the Biology Department)

*Meet with an adviser to officially declare a Minor in Neuroscience*

**OVERVIEW:** Neuroscience, or the study of the structure and function of the nervous system, is a rapidly evolving and increasingly important field crossing departmental and disciplinary boundaries of psychology, biology, and other life sciences. The undergraduate Minor in Neuroscience at Brooklyn College is designed to provide a broad and challenging sequence of courses in psychology and biology emphasizing behavioral, cognitive and clinical neuroscience perspectives as well as cellular and molecular mechanisms. The overall objectives are to meet student demand, attract talented undergraduate students, render students more competitive when applying for graduate schools, and enhance Brooklyn College’s existing program of neuroscience research and scholarship by bringing together students and faculty engaged in this interdisciplinary discipline.

**PROGRAM GOALS:** The several interrelated goals of the Neuroscience Minor are as follows:

- To provide a high-quality curriculum for students interested in the neural sciences.
- To foster an educational experience that maximizes the chances of successfully pursuing career options in the health sciences or gaining admittance into competitive graduate programs in the neurosciences and health-related fields.
- To offer interesting courses for students who seek an introduction to the principles and practices of neuroscience without necessarily wishing to major in the subject.

**PROGRAM REQUIREMENTS:** Interdisciplinary minor, offered by the departments of Psychology and Biology; requiring 18-21 credits including 12 advanced credits each completed with a grade of C- or higher. At least nine of the advanced credits must be completed at Brooklyn College. All courses listed in Group A may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. Only one course from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. PSYC 3600 and one of the courses from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the minor in Psychology. Students who do not major in psychology are strongly encouraged to also take Psychology 3400 or Mathematics 4501.

**Courses**

A. All of the following:
   - Psychology 2600 Mind, Brain, and Behavior;
   - Psychology 2610 Neurobiology/Biology 2020 Neurobiology;
   - Psychology 3600 Behavioral Neuroscience

B. Three of the following:
   - Psychology 3610 Behavioral Neuroendocrinology/Biology 3020 Behavioral Neuroendocrinology;
   - Psychology 3660 Drugs and Behavior;
   - Psychology 3670 Comparative Psychology;
   - Psychology 3680 Human Neuropsychology;
   - Psychology 4690 Special Topics in Biopsychology (cross-listed with Biology 5020); requires approval of the Chair of Psychology or Biology.
Note: The prerequisite for Psychology 2600 is one of the following: Psychology 1 or Psychology 1000 or Psychology 4019 or Health and Nutrition Sciences 2300 or Physical Education 3271. Therefore, students who otherwise would not take any of these courses will have to complete 21 credits for the minor.

ADDITIONAL NEUROSCIENCE-RELATED (NOT REQUIRED) COURSES AT BROOKLYN COLLEGE: These courses are offered through departments other than psychology and may have prerequisite requirements. *Recommended for the Minor in Neuroscience.*

* BIOL 1001 General Biology I
BIOL 1002 General Biology II
BIOL 4011 Molecular Biology of Development
BIOL 3011 Genetics
HNSC 2300 Physiology Laboratory
HNSC 2182 Drugs & Society
CISC 1410 Philosophy & Artificial Intelligence
HNSC 2302 Human Anatomy & Physiology I
SPEC 1178 Language & Hearing Anatomy and Physiology

ADDITIONAL RECOMMENDED (NOT REQUIRED) COURSES AND RESEARCH OPPORTUNITIES:

Though not required as part of the Minor in Neuroscience, students are encouraged to take General Biology I (BIOL 1001) and to obtain research experience in laboratories addressing topics related to clinical, behavioral and cognitive neuroscience.

There are many research opportunities in which students may become involved at Brooklyn College and neighboring institutions across the New York metropolitan area. While research experience itself has strong benefits, it also is useful for interacting more closely with professors and scientists and enhancing preparation for academic or applied graduate programs and neuroscience-related professions.

Students may receive course credit for original research projects they conduct in collaboration with Brooklyn College neuroscience faculty within the Department of Psychology (PSYC 2001, 5001, 5002, 5003, 5004) and Department of Biology (BIO 5001, 5002, 5003W, 5010, 5011, 5012, 5013, 5014W). For more information regarding research opportunities, it is recommended that students review faculty profiles on the websites of the Psychology and Biology Departments, and contact faculty whose research areas are of greatest interest.

THE NEUROSCIENCE MINOR PREPARES STUDENTS FOR:

- Advanced study in an applied, health-related field such as medicine, dentistry, clinical neuropsychology, clinical psychology, public health, neurorehabilitation, pharmacy, nursing, physicians assistance, physical therapy, audiology, speech pathology, exercise physiology.

- Graduate training in research-based neuroscience and related programs with a future career in a university, research institute or center, pharmaceutical company, or hospital/medical setting.

- Research assistant or laboratory technician positions in pharmaceutical, biotech, hospital, or university settings.

- Middle or high school teaching following the completion of a teacher certificate program in the School of Education.