Basic Features of the Program

- Students select a major of their choice among the three departments that participate in the concentration.

 These departments are:
 Biology, Chemistry and Psychology, Course requirements for the concentration are dependent upon a student's major.
- A special notation is indicated on the student's official records and transcript indicating the area of concentration.
- A unique feature provided by the program is a laboratory independent research project in neuroscience (PS 497N). The project may be carried out in any of the three participating departments. The project may be supervised by any faculty member, but must have approval of the coordinator of the concentration.
- Students are strongly advised to have some background in statistics and computer science. Consultation should be made with the student's advisor as to which courses are most appropriate.
- A GPA of 2.5 in BL 155-158 and CH 141-144 is required for admission into the program.

Neuroscience Concentration at John Carroll University

The Neuroscience Concentration is intended for Biology, Chemistry, and Psychology majors who desire an interdisciplinary approach to the study of physiology, biochemistry, and behavior of higher organisms.

Objective of the Program

- To encourage the convergence of biology, chemistry, and psychology in the study of higher animals.
- To give the undergraduate student competence in physiological and behavioral methods of investigation of the nervous system.

Coordinator of Concentration

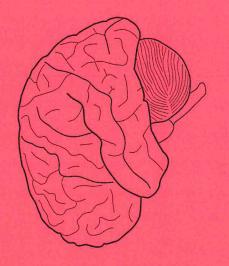
Helen M. Murphy, Ph.D. Department of Psychology

Associate Coordinator

Cyrilla H. Wideman, Ph.D. Department of Biology



Interdisciplinary Neuroscience Concentration



Required Courses for the Biology Major

BL 155–158 Principles of Biology I/II
(Lectures and Labs)

BL 360/360L Human Physiology (Lecture and Lab)

CH 141–144 General Chemistry I/II
(Lectures and Labs)

CH 221-224 Organic Chemistry I/II
(Lectures and Labs)

CH 431 General Biochemistry

AND

BL 475 Endocrinology

OR

CH 435/436 Biochemistry I/II

PS 326 Psychobiology

PS 426 Psychopharmacology

PS 497N Advanced Research
Topics in Neuroscience
(GPA of 3.0 required)

Required Courses for the Chemistry Major

BL 155–158 Principles of Biology I/II (Lectures and Labs)

BL 360/360L Human Physiology (Lecture and Lab)

CH 141–144 General Chemistry I/II
(Lectures and Labs)

CH 221-224 Organic Chemistry I/II (Lectures and Labs)

CH 435/436 Biochemistry I/II

PS 326 Psychobiology

PS 426 Psychopharmacology

PS 497N Advanced Research
Topics in Neuroscience
(GPA of 3.0 required)

Required Courses for the Psychology Major

BL 155–158 Principles of Biology I/II
(Lectures and Labs)

BL 360/360L Human Physiology
(Lecture and Lab)

CH 141–144 General Chemistry I/II
(Lectures and Labs)

CH 221-224 Organic Chemistry I/II (Lectures and Labs)

PS 101 General Psychology

PS 326

Psychobiology

PS 386 Mind, Brain and Behavior

PS 426 Psychopharmacology

PS 497N Advanced Research
Topics in Neuroscience
(GPA of 3.0 required)