# Behavioral Neuroscience (BNS) Concentration
# B.S. Degree in Psychology
## Frequently Asked Questions

WRIGHT STATE UNIVERSITY
Department of Psychology, 335 Fawcett Hall
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**What is the BNS concentration?**
This concentration focuses an undergraduate's Bachelor of Science (B.S.) degree on courses aimed at understanding the biological basis of behavior, cognition, and emotion. Discoveries about the functioning of the brain have been accelerating in recent decades and continue to both amaze and inform us. In the BNS concentration, you will learn how to apply those discoveries to understand normal and pathological human behavior with an emphasis on evolutionary adaptiveness. This list highlights some of the required and recommended courses for the concentration, and the Psychology B.S. degree checklist **(available on Wings Express in your degree audit)** should be used as your master checklist for those requirements. To add the BNS concentration to your degree program, speak to your advisor (cosm-advisors@wright.edu).

**What does the BNS concentration prepare me for?**
A solid background in behavioral neuroscience will prepare you well for more advanced studies in experimental psychology, neuroscience, medicine, and related fields. You will be qualified, with a B.S., for work in applied fields like clinical research coordination, neuromonitoring, and as a laboratory research assistant. The required and recommended courses for the BNS concentration will equip you with the analytic skills to evaluate and apply scientific data and conduct basic and applied/clinical research.

A few examples include:

- A clinical research coordinator (a job requiring a bachelor's degree) can work under an M.D., D.O., or Ph.D. to evaluate the efficacy of new interventions for mental illnesses or neurological disorders.
- A pharmaceutical representative (a job requiring a bachelor's or master's degree) represents a drug company and educates pharmacists and physicians about new medications.
- A principal investigator (Ph.D.-level training required) would conduct grant-funded research (e.g., stress-induced isolation triggering neural changes associated with depressive symptomology) within BNS and employ research assistants and lab technicians to help them carry out basic animal research that translates into human applications.

**Should I go to graduate school?**
Graduate school attendance depends on one's career goal. In general, the higher the level of education, the higher the degree of responsibility has in one's job. For example, the principal investigator of a research project at an academic institution, a government laboratory, or at a research and development department in industry would typically have an advanced degree; a research assistant would not. An advanced degree is generally not required by many government and industry jobs.

**Besides the classes required for the B.S. degree and the BNS concentration (see next page), what other preparation will I need?**

- We recommend you seek out research experiences while you are an undergraduate student. Reach out to faculty members from whom you've taken classes to see if you could serve as a research assistant in their lab. You can earn Independent Research credit (PSY 4060) or even engage in an undergraduate Honors Research project (PSY 4070) with a faculty member. Faculty members' interests are listed on the Department's webpages: https://science-math.wright.edu/psychology/faculty-and-staff-directory
- We also encourage you to become active in professional organizations, including Psychology Club and Psi Chi, on WSU's campus.
- Faculty occasionally have reading groups during the year or over the summer, in conjunction with activities in their labs. Additionally, the Department holds a weekly Brown Bag seminar on Fridays where Department members or community associates present colloquia.
- The Undergraduate Practicum is a course (PSY 4030) where a student does work in the community for course credit. To learn more about this program, see the Practicum webpage: https://science-math.wright.edu/psychology/practicum-in-psychology
- For those planning to go to graduate school, medical school, law school, or other post-baccalaureate programs, do your research on how to prepare, including pre-requisite courses, standardized tests (e.g., GRE, MCAT, LSAT) in your field. Build up your verbal, quantitative, and analytical skills during your entire undergraduate period.

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**Required and Recommended Courses**

*This list highlights courses within the BNS Concentration. The Psychology B.S. degree checklist (on Wings Express in your degree audit) should be used as your master checklist for those requirements. Courses below are some of the required and recommended courses for the BNS Concentration, but you are not limited to taking only these courses to satisfy your Psychology electives requirements. For your General Electives, we strongly encourage you to select more courses in natural sciences (e.g., neurophysiology, biology, chemistry), mathematics, and computer science. Please consult with a COSM advisor when planning your semesters (cosm-advisors@wright.edu) and use your degree audit to stay up-to-date on your progress. A minimum grade of 3.2 in Psychology coursework is required to graduate with the concentration.*

**A. BNS-REQUIRED COURSES**

**PSY 3910**, Behavioral Neuroscience I
**PSY 3920**, Behavioral Neuroscience II
**PSY 3930**, Behavioral Neuroscience Methods
**PSY 3010**, Research Methods I
**PSY 3020**, Research Methods II
**PSY 4020**, Advanced Topics in Research Methods
**BIO 1120/1150 or CHM 1210/1220** (with labs)

**B. BNS-RECOMMENDED PSY CORE COURSES** (Must take PSY 3910, and 4 of the 5 remaining courses from this list)

**Basic Processes** (2 minimum):
- **PSY 3210**, Cognition & Learning
- **PSY 3610**, Conditioning & Learning
- **PSY 3710**, Perception

**Integration of Basic Processes** (2 minimum):
- **PSY 3110**, Abnormal Psychology
- **PSY 3410**, Developmental Psychology

**Application of Basic Processes** (1 minimum):
- **PSY 3070**, Tests and Measures
- **PSY 3090**, Health Psychology

**C. BNS-RELEVANT CAPSTONE COURSES:** (Select **two** from this list.)

**PSY 4540**, Human Sexuality Capstone (override required)
**PSY 4900**, Variable Topics in Behavioral Neuroscience Capstone
**PSY 4920**, Clinical Neuroscience Capstone
**PSY 4940/4941**, Animal Behavior Capstone (4941 includes the study abroad option)

**D. BNS-RECOMMENDED ELECTIVES**

**PSY 2110**, Human Sexuality
**PSY 2910**, Drugs and Behavior
**PSY 2920**, Hormones and Behavior
**PSY 2940**, Mind, Body, Consciousness and Reality
**PSY 3630**, Conditioning and Learning Methods

**E. ADDITIONAL ELECTIVES TO CONSIDER**

*Consider taking an Independent Reading or Independent Research course, entering the Honors Program[a], or participating in a Practicum.*

**PSY 4030**, Practicum in Applied Psychology (in relevant areas)
**PSY 4040**, Independent Reading[b]
**PSY 4050**, Honors Seminar[a]
**PSY 4060**, Independent Research[b]
**PSY 4070**, Honors Research Project[a]

[a] Information about the Honors Program can be obtained from the Department of Psychology Office in 335 Fawcett.

[b] To participate in Independent Readings or Independent Research, directly contact the faculty member with whom you are interested in working.