

B.A. in Behavioral Neuroscience

Colleges of Humanities and Social Sciences & Sciences and Technology

2007-2008 Academic Advising Center Old Main 380 360.650.3850 Advising@cc.wvu.edu

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What is the study of Behavioral Neuroscience?

Behavioral neuroscience explores the role of the nervous system in normal and abnormal behavior, thought and emotion. For

example, Behavioral Neuroscientists study the biological basis of normal learning and memory as well as psychiatric illnesses

such as depression, schizophrenia and drug abuse. (en.wikipedia.org/wiki/Behavioral_neuroscience)

Why should I consider a Behavioral Neuroscience Major?

This interdisciplinary program provides students with the specialized preparation and technological sophistication critical for success in a variety of graduate-training programs, including

Neurosciences, Psychology, Pharmacology, Mental Health, and Neurobiology; and health care, including Medicine and Dentistry. For those students who do not anticipate pursuing post-graduate education,

the proposed degree program provides an excellent platform for entry-level positions in such areas as biomedical research and the pharmaceutical industry.

Declaring a Behavioral Neuroscience Major:

Complete the following:

- 75 undergraduate college credits
- Completion of the following with an average of 2.9 or higher:

CHEM 121, 122, 123,
BIOL 204, 205, 206
PSY 101, 220

After the above are complete, submit an application to the Biology Department Office (BI 315)

or the Psychology Department (MH 220).

The deadline for this application is the end of the 2nd full week of classes fall, winter, and spring quarters.

Mid Program Checkpoint:

Students intending on completing a Bachelor's of Arts degree in Behavioral Neuroscience within four years should complete the following courses by the start of their junior year. Students are expected to follow all prerequisite requirements for courses and seek early departmental advisement.

Coursework:

PSY 101, 220
CHEM 121, 122, 123
MATH 114
BIOL 204, 205, 206
ENG 101
18 non-science GUR credits

Contact Information:

Program Director:

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Psychology

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Sample Career Fields:

- Neuroscientist
- Biomedical Researcher
- Psychiatrist
- Medical Doctor
- Dentist
- Pharmacist
- Veterinarian
- Physician Assistant
- Pharmaceutical Sales

Behavioral Neuroscience Major Requirements: 109-110 Credits

Supporting Courses: 24 credits

CHEM 121, 122, 123 General Chemistry I, II, III (5, 5, 4)
CHEM 251 Elementary Organic Chemistry (5) or equivalent
MATH 114 Precalculus I (5)

Required Biology Courses: 29 credits

BIOL 204 Intro to Evolution, Ecology, Biodiversity (4)
BIOL 205 Intro to Cellular and Molecular Biology (5)
BIOL 206 Intro to Organismal Biology (5)
BIOL 321 Genetics (4)
BIOL 323 Cellular and Molecular Biology (4)
BIOL 325 Ecology (3)
BIOL 432 Evolutionary Biology (4)

Required Psychology Courses: 33 credits

PSY 101 Intro to Psychology (5)
PSY 220 Intro to Behavioral Neuroscience (5)
PSY 301, 302, 303 Research Methods (5, 5, 5)
PSY 320 Topics in Behavioral Neuroscience (5)
PSY 328 Techniques in Behavioral Neuroscience (3)

Required Biology or Psychology Courses: 4-5 credits Choose one:

BIO 410 Animal Behavior (4)
PSY 324 Comparative Psychology (5)

These required or elective courses will also satisfy the GUR or other Graduation Requirement:

QSR: MATH 114
SSC: PSY 101
LSCI: BIO 204, 205, 206
CHEM 121, 122, 123, 251
WP: PSY 420, 421, 422, 424, BIOL 432, 495

Electives under Advisement: 19 credits

BIOL 322 Genetics Lab (4)
BIOL 324 Methods in Molecular Biology (3)
BIOL 382 Sociobiology (4)
BIOL 403 Physiological Ecology of Animals (5)
BIOL 410 Animal Behavior (4)
BIOL 434 Population Genetics (3)
BIOL 467 Comparative Vertebrate Physiology (3)
BIOL 468 Comparative Vertebrate Physiology Laboratory (3)
BIOL 482 Developmental Biology of Animals (3)

Choose one:

BIOL 300 Directed Independent Study (1-10)*
BIOL 395 Biology Research Participation (14)
BIOL 400 Directed Independent Study (1-10)*
BIOL 494 Biology Research (1-5)
BIOL 495 Research Communication (1-4)

PSY 210 Cognition (5)
PSY 310 Sensation and Perception (5)
PSY 321 Learning (5)
PSY 322 Motivation (5)
PSY 323 Psychopharmacology (5)
PSY 420 Seminar in Behavioral Neuroscience (3)
PSY 421 Seminar in Learning (3)
PSY 422 Seminar in Motivation (3)
PSY 424 Seminar in Comparative Psychology (3)
PSY 428 Advanced Techniques in Behavioral Neuroscience (3)
PSY 300 Directed Independent Study (1-10)*
or PSY 400 Directed Independent Study (1-10)*

*A maximum combined total of 10 credits in PSY 300, 400 or BIO 300, 395, 400, 411, 494, 495 can be applied to the major.

Other Psychology or Biology options:

B.A. Psychology (64 credits)

B.A. Biology (74 credits)

B.A. Anthropology/Biology (89 plus 23 supporting credits)

B.S. Biology (90-95 credits)

B.S. Biology/Anthropology (101-104 credits)

B.S. Cellular and Molecular Biology/Biochemistry (105 credits)

B.S. Biology/Mathematics (104-105 credits)

B.A.Ed. Psychology: Human Development-Elementary (49-54 credits + 107 credits for the Elementary Education Professional Program)

B.A.Ed. Biology/Chemistry-Secondary (103-104 credits + 64 credits for the Secondary Education Professional Program)

Minor Biology (43 credits)

Minor Psychology (24 credits)

Minor Sport Psychology (30 credits)