

Bachelor of Science in Behavioral Neuroscience

Bachelor of Science in Behavioral Neuroscience Overview

Behavioral Neuroscience is a major in Psychology at the University of Kansas. The Bachelor of Science in Behavioral Neuroscience is designed for students with a focused interest in the biological bases of behavior and thought. The Bachelor of Science is well suited for students who are contemplating professional or mainly research careers in medicine, pharmacology, veterinarian medicine, animal science, neurology, neurobiology, and neuroscience. It is also suitable as a degree for those headed into other health-related fields or graduate school in other areas of psychology. As a behavioral neuroscience major, you will take courses in many different departments because, as you explore the neural basis of behavior and prepare to enter the neuroscience research field, you will need to acquire knowledge in the realms of chemistry, biology, psychology, statistics, and even computer science.

For additional information and advising for the Bachelor of Science Major please contact:

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Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (<http://admissions.ku.edu/>) for application deadlines and specific admission requirements.

Visit the International Support Services (<http://www.iss.ku.edu/>) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (<http://credittransfer.ku.edu/>) website.

Requirements for the B.S. Degree

B.S. in Behavioral Neuroscience

In addition to degree and major requirements, all students must complete the KU Core.

Behavioral Neuroscience Prerequisite or Co-Requisite Knowledge

Code	Title	Hours
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Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major.

Mathematics. Satisfied by:		
MATH 101	College Algebra: _____	3
or MATH 104	Precalculus Mathematics	
MATH 115	Calculus I	3
or MATH 125	Calculus I	
Computing. Satisfied by:		
EECS 138	Introduction to Computing: _____ (Python, C++, or MATLAB are recommended)	3
Biology. Satisfied by:		
BIOL 100	Principles of Biology	3
or BIOL 150	Principles of Molecular and Cellular Biology	
Chemistry. Satisfied by:		
CHEM 130	General Chemistry I	5

Students completing this degree as part of their preparation to apply to medical school should consult a College Advisor for information about other courses that might be required to complete that preparation.

BEHAVIORAL NEUROSCIENCE CORE KNOWLEDGE AND SKILLS

Code	Title	Hours
PSYC 102	Orientation Seminar in Psychology	1
PSYC 104	General Psychology	3
or PSYC 105	General Psychology, Honors	
Research methods and Statistics (9-10 hours) Satisfied by:		
PSYC 200	Research Methods in Psychology	3
PSYC 210	Statistics in Psychological Research	3
Students may choose from one of the following:		3-4
PSYC 500	Intermediate Statistics in Psychological Research	
PSYC 650	Statistical Methods in Behavioral and Social Science Research I	
MATH 365	Elementary Statistics	
MATH 526	Applied Mathematical Statistics I	
Majors must complete two of the following Behavioral Neuroscience Courses (6 hours minimum). Satisfied by:		6
PSYC 370	Behavioral Neuroscience	
PSYC 375	Cognitive Neuroscience	
PSYC 380	Clinical Neuroscience	
PSYC 385	Social Neuroscience	
Elective Courses in Psychology or Other Disciplines (note that additional prerequisites may be required for some classes listed).		12
Majors must complete 12 hours minimum. Satisfied by:		
PSYC 390	The Psychology of Aging	
PSYC 318	Cognitive Psychology	
PSYC 418	Introduction to Cognitive Science	
PSYC 535	Developmental Psychopathology	
PSYC 595	Eating and Weight Disorders	

PSYC 605	Health Psychology	
PSYC 630	Clinical Psychology	
PSYC 723	Advanced Cognitive Psychology	
LING 438	Neurolinguistics I	
SPLH 620	The Communicating Brain: The Ultimate Personal Computer	
BIOL 435	Introduction to Neurobiology	
BIOL 650	Advanced Neurobiology	
Applied Research Experience (4 hours minimum). Satisfied by:		4
PSYC 449	Laboratory/Field Work in Human Biology	
PSYC 460	Honors Thesis	
PSYC 480	Independent Study	
PSYC 481	Research Practicum	
Integrative Capstone		6
PSYC 625	Experimental Psychology: Methods in Psychophysiology and Neuroscience	

Behavioral Neuroscience Major Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 41-42 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours

Satisfied by 31-32 hours of junior/senior level major coursework.

Major Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<https://sis.ku.edu/gpa-calculator/>).

Below is a sample 4-year plan for students pursuing the BS in Behavioral Neuroscience. To view the list of courses approved to fulfill Core 34, please visit the KU Core 34 page (<https://catalog.ku.edu/core34/>).

Freshman

Fall	Hours Spring	Hours
MATH 101 (Core 34: Math and Statistics (SGE)) ^{030*}	3 PSYC 200 (Major Requirement)	3
PSYC 102 (Major Requirement)	1 CHEM 130 (Core 34: Natural and Physical Sciences (SGE), Bachelor of Science requirement) ^{040*}	5
PSYC 104 (Core 34: Social and Behavior Science (SGE), Major Requirement) ^{050*}	3 Core 34: English (SGE) ⁰¹⁰	3
Core 34: English (SGE) ⁰¹⁰	3 Core 34: Communications (SGE) ⁰²⁰	3
Core 34: Social and Behavior Science (SGE) ⁰⁵⁰	3	
Core 34: Arts and Humanities (SGE) ⁰⁶⁰	3	
	16	14

Sophomore

Fall	Hours Spring	Hours
MATH 125 or 115	3-4 Behavioral Neuroscience Elective Course 300+ (Major Requirement) ³	3
BIOL 150 or 100 (Bachelor of Science requirement)	3 EECS 138 (Bachelor of Science requirement)	3
PSYC 210	3 Core 34: Global Culture (SGE) ⁰⁷⁰	3
Core 34: US Culture (SGE) ⁰⁷⁰	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
	15-16	15

Junior

Fall	Hours Spring	Hours
PSYC 370, 375, 380, or 385 (Major requirement)	3 PSYC 370, 375, 380, or 385 (Major Requirement)	3
PSYC 500, 650, MATH 365, or MATH 526 (Major Requirement)	3 Behavioral Neuroscience Elective Course 300+ (Major Requirement) ³	3
Behavioral Neuroscience Elective Course 300+ (Major Requirement) ³	3 Core 34: Arts and Humanities (SGE) ⁰⁶⁰	3
Applied Research Experience 300+ (Major Requirement) ¹	2 Applied Research Experience 300+ (Major Requirement) ¹	2
Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
	Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	2
	14	16

Senior

Fall	Hours Spring	Hours
PSYC 625 (Capstone Requirement, Major Requirement)	6 Behavioral Neuroscience Elective 300+ (Major Requirement) ³	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3 Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
	Second Area of Study/ Elective/Degree/Junior-Senior Hours ²	3
	15	15

Total Hours 120-121

- ¹ Students are required to complete 4 hours minimum towards the Applied Research Experience. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
- ² Hour requirements (incl. 45 jr/sr hrs) are typically met through Core 34, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
- ³ Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

*Courses with a * designate courses that are degree requirements but can also be taken to fulfill the KU Core 34 requirement. If another course is used to fulfill the Core 34 requirement, the course listed is still required as a degree requirement.

Notes:

* - This course is a Required major course and is also part of Core 34: Systemwide General Education. If this course is not taken to fulfill the Core 34:SGE requirement, it must be taken in place of elective hours.

** - This course is a Recommended Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.

*** - This course is a Required Core 34: Systemwide General Education course. This program is approved by the Kansas Board of Regents to require this specific Core 34: Systemwide General Education course. If a student did not take this course it must be taken in addition to other degree requirements.

Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. This program is distinct from College Honors (<https://honors.ku.edu/>). A student may earn College Honors, Psychology Honors, neither, or both. The Psychology Honors program requires students to have a faculty research mentor, take *two* semesters of PSYC 460: Honors Thesis (formerly called Honors in Psychology), complete a research project, and present their findings in a public forum (including in the PSYC 460 course). Per the college rules, students must complete the course with a grade of B or higher. Per the college rules, the completion of these requirements must be certified to the departmental honors director by at least three members of the college faculty who have read the report of the independent research. Please reference the department website (<https://psychology.ku.edu/honors/>) for specific details.