PHD IN COGNITIVE AND BEHAVIORAL SCIENCES

The Doctor of Philosophy (PhD) in Cognitive and Behavioral Sciences (CaBS) is an 80-credit hour program that prepares students to investigate the biological and psychological foundations of human behavior. By integrating disciplines such as biochemistry, computational biology, genetics, neuroscience, psychiatry, and psychology, the program is designed to explore how the brain regulates behavior across the lifespan, including in contexts of health, disease, and development.

Students receive extensive training in experimental design, data analysis, and advanced research techniques. The curriculum includes laboratory rotations, coursework in cognitive and behavioral science, and mentored research leading to a dissertation. Areas of study include learning, memory, decision-making, motivation, emotion, gene-environment interactions, and the effectiveness of behavioral health treatments. By gaining experience in neuroimaging, machine learning, and omics technologies, students are equipped with the tools to analyze complex data and generate new insights into brain-behavior relationships.

Upon completion, graduates will be prepared for a range of careers in academia, industry, and clinical research. They may pursue roles as academic researchers or faculty members, scientists in pharmaceutical or biotechnology companies, data scientists specializing in behavioral health, or consultants in cognitive science and neurotechnology. Graduates may also lead research initiatives in nonprofit or government organizations, develop translational interventions for mental health, or contribute to education and training in behavioral sciences. The program is ideal for students committed to advancing the science of behavior and applying that knowledge to improve mental health outcomes.

Admission requirements for the PhD in Cognitive and Behavioral Sciences include:

- Bachelor's or Master's degree from an accredited institution, preferably in biology, neuroscience, psychology, statistics, or a closely related field. Applicants with degrees in unrelated disciplines may be considered if they have completed at least one year of post-baccalaureate research experience in a relevant area.
- A minimum GPA of 3.0 on a 4.0 scale is required for all undergraduate and graduate coursework.
- The GRE is not required.
- Students with international college transcripts must submit a course-by-course evaluation report by either World Education Services (WES) or Educational Credential Evaluators (ECE). Final transcript credential evaluation results must be submitted with the application.
- A personal statement (maximum one page) outlining motivation for applying, interest in the field and program, commitment to a career in cognitive and behavioral sciences, and relevant experiences. The statement should also describe prior research experience, including skills acquired and any related presentations or publications.
- Letters of recommendation from academic mentors or research supervisors who can attest to the student's research experience and potential.

The admissions committee for the PhD in CaBS program will consider multiple factors beyond GPA and academic record. Factors including research experience, undergraduate program curriculum and objectives, honors and awards, community service and outreach, responsibilities outside of academia including family, and success in overcoming any challenges, if these have been discussed by the applicant, will all be considered when evaluating the application.

Students entering with a Master of Science in CaBS from SBHS will begin as third-year students and be exempt from core and elective courses already completed. They will be required to complete one additional research rotation. Students with a Master's degree in another field will follow the same curriculum as those entering with a Bachelor's degree.

Only full-time students will be admitted to the program.

Suggested PhD in CaBS Curriculum

Semester 1 - Fall

CABS 5111 Responsible Conduct of Research (1 SCH)
CABS 5211 Research Tutorials (Rotations 1 of 3) (2 SCH)
CABS 5301 Biological Statistics & Study Design I (3 SCH)
CABS 5303 Neurobiology and Neuroanatomy of Complex Behavior (3 SCH)

Semester 2 - Spring

CABS 5100 Journal Club (2 SCH)
CABS 5302 Biological Statistics & Study Design II (3 SCH)
CABS 5304 Models of Human Cognition and Behavior (3 SCH)
CABS 5211 Research Tutorials (Rotations 2 of 3) (2 SCH)

Semester 3 - Summer

CABS 5211 Research Tutorials (Rotations 3 of 3) (2 SCH)

Semester 4 - Fall

CABS 6301 Biological Basis of Behavioral Disorders (3 SCH)
Prescribed Elective (1 of 2) (3 SCH)
CABS 9300 Research (4 SCH)

Semester 5 - Spring

CABS 9300 Research (4 SCH)
Prescribed Elective (2 of 2) (3 SCH)
CABS 5100 Journal Club (2 SCH)

Semester 6 - Summer

CABS 9300 Research (4 SCH)

Semester 7 - Fall

CABS 5100 Journal Club (2 SCH)
Elective of choice (3 SCH)
CABS 9300 Research (4 SCH)

Semester 8 - Spring

CABS 5100 Journal Club (2 SCH)
Elective of choice (3 SCH)
CABS 9300 Research (4 SCH)

Semester 9 - Summer

CABS 9300 Research (4 SCH)

Semester 10 - Fall

CABS 5100 Journal Club (2 SCH)
CABS 9300 Research (4 SCH)

Semester 11 - Spring

CABS 5100 Journal Club (2 SCH)
CABS 9300 Research (4 SCH)

Semester 12 - Summer

CABS 5100 Journal Club (2 SCH)
CABS 9300 Research (4 SCH)

Prescribed Elective Courses (choose 2 courses for 6 SCH total)

CABS 6302 Advanced Assessment and Analysis of Behavior (3 SCH)
CABS 6303 Advanced Data Science for Neuroscience (3 SCH)
CABS 6304 Applied Behavioral Genomics (3 SCH)

Elective Courses (choose 2 courses for 6 SCH total)

CABS 7301 Multimodal Brain Imaging (3 SCH)
CABS 7302 Model Systems in Basic and Clinical Research (3 SCH)
CABS 8301 Innovative Treatments in Neuropsychiatry (3 SCH)
CABS 8302 Neuroimmunology (3 SCH)
CABS 8303 Psychopharmacology (3 SCH)