
# The University of Texas
# Health Science Center at Houston
# School of Behavioral Health Sciences

2024-2025 Academic Catalog

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# SCHOOL OF BEHAVIORAL HEALTH SCIENCES

On November 17, 2022, The University of Texas System Board of Regents approved the UTHealth Houston School of Behavioral Health Sciences. The school was established to grow a behavioral health workforce to meet the growing needs of mental-health care for children and adults.

**Attention prospective students**: the School of Behavioral Health Sciences has one new masters programs approved for enrollment starting fall 2025.

- MS in Cognitive and Behavioral Sciences (p. 3)

## About Us

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## Message from the Dean

Welcome to UTHealth Houston School of Behavioral Health Sciences!

At UTHealth Houston's newest school, we are embarking on a transformative journey that will enhance mental health care and lead behavioral health innovation in Texas.

We recognize the critical need for behavioral health care professionals. With an estimated 1 in 5 people — including children — living with a mental illness, our mission is clear. We must bridge the gap between Texas' needs and staffing shortages by creating a robust pipeline of behavioral health care providers and leading researchers.

We are building on UTHealth Houston's long history of innovation, collaboration, commitment to community, and excellence in education, research, and clinical care. We invite you to be part of our mission. Together, we will transform behavioral health services in Texas, one compassionate provider at a time.

The School of Behavioral Health Sciences is the only graduate school in Texas, and of the few in the United States, to focus exclusively on Behavioral Health. If being at the cutting edge of a new and unique learning environment housed in the world's largest medical center with unmatched opportunities for direct clinical and research experience is appealing to you, then join us to be among the Behavioral Health Science leaders and practitioners of today and tomorrow.

Sincerely,
**Jair C. Soares, MD, PhD**
Founding Dean, UTHealth Houston School of Behavioral Health Sciences
Vice President for Behavioral Sciences
Professor & Pat R. Rutherford, Jr. Chair in Psychiatry, Louis A. Faillace, MD, Department of Psychiatry and Behavioral Sciences
Executive Director, John S. Dunn Behavioral Sciences Center
Director, Center of Excellence on Mood Disorders

## Mission Statement

### The UTHealth Houston School of Behavioral Health Sciences is meeting the behavioral needs of the present and future through advancements in research and clinical training.

At UTHealth Houston School of Behavioral Health Sciences, our mission is to advance the understanding of human behavior by integrating research, education, and practice in psychology, social work, and cognitive and behavioral sciences; to empower current and future practitioners and innovators; to transform behavioral care within Texas and the US; to drive meaningful change through rigorous training, innovative research, and the development of evidence-based solutions that improve behavioral health and well-being across populations.

## Accreditation

### University Accreditation

The University of Texas Health Science Center at Houston (UTHealth Houston) is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, doctoral, and professional degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of The University of Texas Health Science Center at Houston may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges 1866 Southern Lane, Decatur, Georgia 30033-4097 by calling (404) 679-4500, or by using information available on SACSCOC's website (https://www.sacscoc.org).

## School Administration and Faculty

### School Leadership

**Jair Soares, MD, PhD**
Founding Dean

**Scott D. Lane, PhD**
Associate Dean, Academic and Student Affairs

**Mary Lopez, MBA, CRA**
*Acting* Associate Dean, Management

**Michelle Patriquin, PhD, ABPP**
Assistant Dean, Digital Health & Innovation

**Deborah Pearson, PhD**
Associate Dean, Faculty Affairs

**Lokesh Shahani, MD, PhD, MPH, FACP, FASAM**
Associate Dean, Clinical Integration

**Jeffrey R. Temple, PhD**
Associate Dean, Clinical Research

# Tuition and Fees

Tuition and fees are subject to change and become effective on the date enacted. The Texas Legislature does not set the specific amount for any particular student fee. Student fees are authorized by state statute; the specific fee amounts and the determination to increase fees are made by the university administration and The University of Texas System Board of Regents.

A resident doctoral student who has a total of 100 or more semester credit hours of doctoral work at an institution of higher education is required to pay nonresident doctoral tuition rates. For more information contact the Office of the Registrar.

**Tuition and Fees for 2025-2026 Academic Year**
The School of Behavioral Health Sciences will enroll students starting in Fall 2025. The 2025-2026, Resident tuition is $350 per semester credit hour; Non-resident tuition is $1,220 per semester credit hour.

Information regarding fees that are assessed to all students across all UTHealth Houston schools can be found in the General Information Catalog here (https://catalog.uth.edu/general-information/tuition-fees-information/). The Bursar's website posts all current Tuition and Fee information here (https://www.uth.edu/bursars/student-resources/tuition-fees/).

**SBHS School Specific Fees:**

- **Clinical Placement Fee** - $235/semester, assessed to students enrolled in the following degree programs; MS Social Work, MS Clinical Psychology, PhD Clinical Psychology, and PsyD Clinical Psychology.
- **Computer Resource Fee** - $75/semester, assessed to all enrolled students at SBHS.
- **Technology Fee** - $150/semester, assessed to all enrolled students at SBHS.
- **Student Orientation Fee** - $100 one-time fee, assessed to students at matriculation into degree program.

**Student Health Insurance Program**
The Board of Regents of The University of Texas System mandates health insurance for all students enrolled in the UT System health components. As such, each UTHealth Houston student who cannot provide evidence of coverage under another approved plan will be enrolled in the Student Health Insurance Plan (SHIP) with Academic Health Plans and assessed a health insurance fee. For more information regarding Student Health Insurance you can go to the Registrar's website here (https://www.uth.edu/registrar/current-students/student-information/health-insurance.htm) and Auxiliary Enterprises Student Insurance website here (https://www.uth.edu/auxiliary-enterprises/insurance/).

# Contact Us

**The University of Texas Health Science Center at Houston School of Behavioral Health Sciences**

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**E-mail:** uthealthhouston.sbhs@uth.tmc.edu (https://uth-next.courseleaf.com/behavioral-health-sciences/about/contact/Mail%20to:%20uthealthhouston.sbhs@uth.tmc.edu)

# Programs of Study

## Degrees

- MS in Cognitive and Behavioral Sciences (p. 3)

# MS in Cognitive and Behavioral Sciences

The Master of Science in Cognitive and Behavioral Sciences (MS CaBS) program is dedicated to understanding how the central nervous system influences human behavior across the lifespan, including health, disease, typical and atypical development. By combining psychology, psychiatry, neuroscience, computation science, biochemistry, and genetics, the program aims to explore the fundamental principles underlying behavior.

Further, students will receive extensive training in experimental design and research techniques. This research includes physiological underpinnings of learning, memory, decision-making, motivation, emotion, and treatment effectiveness. Students will also work closely with dedicated research mentors on faculty research projects and a thesis.

Admission requirements for the Master of Science in Cognitive and Behavioral Sciences include:

- Bachelor's degree from an accredited institution of higher education or equivalent (if an international student) with a major in psychology, biology, statistics, neuroscience, or a related field.
- Grade point average of at least 3.0 on a scale of 4.0 on all undergraduate and graduate coursework.
- The GRE is not required.
- International students must have a Test of English as a Foreign Language (https://www.ets.org/toefl.html) (TOEFL), with a minimum score of 80 on the internet (TOEFL iBT version) or a minimum score of 6.5 on the International English Testing System (https://ielts.org/ielts-usa/) (IELTS) is required.
- Students with international college transcripts must submit a course-by-course evaluation report by either World Education Services (https://www.wes.org/) (WES) or Educational Credential Evaluators (https://www.ece.org/) (ECE). Final transcript credential evaluation results must be submitted with the application.
- A personal statement including purpose in applying, interest in the field in general, the program specifically, commitment to a career in cognitive and behavioral science following the degree, community service or outreach, past research experience, and, if the applicant desires, examples of success in overcoming any challenges faced in career path goals. This personal statement is mandatory and should not exceed one page.
- Previous research experience is encouraged but not required for the MS in CaBS program. However, if the applicant has previous research experience, the applicant is encouraged to include a list of references for any posters or papers that were related to the research in the personal statement, along with letters of recommendation from former teachers or mentors who can attest to the student's prior research experience.

The admissions committee for the MS 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. Only full-time students will be accepted.

The Master of Science in Cognitive and Behavioral Sciences (MS CaBS) degree program is comprised of 36 semester credit hours (SCH) that includes coursework, research tutorials, and a thesis to graduate. The program is typically completed over two (2) years of full-time study.

In the first year of study, students are exposed to foundational knowledge and research in cognitive and behavioral sciences. Coursework covers essential topics such as responsible conduct of research, biological statistics and study design, neurobiology and neuroanatomy of complex behavior, and models of human cognition and behavior. Students also participate in a journal club to develop communication strategies through presentations and discussions, and complete research tutorials to gain hands-on research experience through lab rotations under faculty supervision.

The second year of study is dedicated to specialization and advanced research. Students engage in courses such as the biological basis of behavioral disorders and prescribed electives like advanced assessment and analysis of behavior, advanced data science for neuroscience, and applied behavioral genomics. They continue to participate in the journal club, present their research updates, and work on their thesis, which involves designing, conducting, analyzing, and disseminating research under faculty direction.

To graduate, students must complete a total of 36 SCH, including the successful defense of their thesis based on their research. The program's rigorous academic curriculum and practical training prepare students with the foundation to support mental health research in the fields of data sciences, enter academia and/or industry, be responsible for the execution of experiments designed by faculty members or supervisors, serve as program managers, carry out complex experiments, teach, or to transition into PhD and MD programs.

| Course | Title | Hours |
|---|---|---|
| **First Year** | | |
| **Fall** | | |
| | Responsible Conduct of Research: The applied ethics course will be structured to include didactics, faculty panel discussion, on-line training, and student example case presentations. The course will align with the National Institutes of Health training recommendations and their training program in ethics. Course topics will include Informed Consent, Rigor and Reproducibility, Research Misconduct, Peer Review, Authorship, Identification and Reporting of Conflict of Interest, Plagiarism, including topics in Artificial Intelligence, and Collaboration. | 1 |
| | Biological Statistics & Study Design I: The study design component will cover experimental studies/randomized controlled trials and observational studies. Analytic approaches will cover generalized linear modeling with multilevel extensions for correlated data using both Frequentist and Bayesian inferential approaches. | 3 |
| | Neurobiology and Neuroanatomy of Complex Behavior: This course will cover topics related to the foundations of neurobiology, including neurochemistry, molecular and cellular neuroscience (action potential, synaptic transmission, receptors, and plasticity), systems neuroscience, introduction to neuroanatomy, and their influence on behavior. | 3 |
| | Research Tutorials (Rotations) 1 of 2: Students complete tutorial rotations under the supervision of two or more Cognitive and Behavioral Sciences faculty members by observing ongoing research. During the10-week rotation, students will spend the equivalent of five afternoons per week in the laboratory (20 hours per week for 10 weeks, for a total of 200 hours). In consultation with their faculty advisors, students will select the research areas which best support their educational goals. Repeat course once. | 2 |
| | **Hours** | **9** |
| **Spring** | | |
| | Models of Human Cognition and Behavior: Students become familiar with human cognition and behavior through an in-depth examination of cutting-edge models and theories. Students will critically evaluate various theoretical frameworks, computational models, and empirical research, gaining insight into topics such as decision-making, memory, emotion, social interaction, and problem-solving. By synthesizing perspectives across different fields such as psychology, neuroscience, and cognitive science, this course equips students with a deeper comprehension of the intricate mechanisms underlying human thought and behavior, fostering a solid foundation for further academic pursuits and clinical applications. | 3 |
| | Biostatistics & Study Design II: The study design component will cover advanced experimental studies/randomized controlled trials and observational studies including flexible/adaptive designs, SMART designs n-of-1 clinical trials and stepped wedge designs. This course will expand the use of generalized linear models to non-normal, continuous outcomes, additional discrete outcomes as well as time-to-event data with multilevel extensions for correlated data using both Frequentist and Bayesian inferential approaches. | 3 |
| | Journal Club: The Journal Club serves multiple practical purposes that allow students to learn about the principles of pedagogy and communication strategies, work to develop their own communication strategies through frequent presentations of recent high impact articles and receive feedback both from faculty and fellow students that will allow revision of these skills. The Journal Club will also be a forum for annual refreshers for ethics and a routine platform for discussions of controversial topics/scientific developments/recent publications. This will also be the forum for presentation of each student's own research/ research update each year. | 1 |
| | Research Tutorials (Rotations) 2 of 2: Students complete tutorial rotations under the supervision of two or more Cognitive and Behavioral Sciences faculty members by observing ongoing research. During the10-week rotation, students will spend the equivalent of five afternoons per week in the laboratory (20 hours per week for 10 weeks, for a total of 200 hours). In consultation with their faculty advisors, students will select the research areas which best support their educational goals. | 2 |
| | Summer research is optional | |
| | **Hours** | **9** |
| **Second Year** | | |
| **Fall** | | |
| | Biological Basis of Behavioral Disorders: This course will highlight current state of the art advances in technology that have led to an increased understanding of the biological basis of mental health disorders, including schizophrenia, bipolar disorder, depression, posttraumatic stress disorder, and substance use disorders. The course will include discussions on challenges that are unique to mental health disorders, and how knowledge of biological underpinnings can be translated to clinical treatments. The presentations will be led by researchers with expertise in the specific disorder, and will focus on recent publications on the topic, to facilitate an interactive discussion with students. | 3 |
| | Prescribed Elective: Elective 1 of 2 (see elective table below) | 3 |
| | Research: Once a student selects a mentor, they will conduct hands-on research every semester in the area of choice, designing a focused study to complete during the program's duration, in consultation with the faculty mentor. | 3 |
| | **Hours** | **9** |
| **Spring** | | |
| | Prescribed Elective: Elective 2 of 2 (see elective table below) | 3 |
| | Journal Club: The Journal Club serves multiple practical purposes that allow students to learn about the principles of pedagogy and communication strategies, work to develop their own communication strategies through frequent presentations of recent high impact articles and receive feedback both from faculty and fellow students that will allow revision of these skills. The Journal Club will also be a forum for annual refreshers for ethics and a routine platform for discussions of controversial topics/scientific developments/recent publications. This will also be the forum for presentation of each student's own research/ research update each year. | 1 |

| | |
|---|---|
| Thesis: Design, conduct, analyze, and disseminate research under the direction of faculty advisor. The thesis is a substantive piece of scholarship involving primary and secondary research, which serves to demonstrate mastery over the discourse, methods, and content of a particular topic under the umbrella of Cognitive and Behavioral Sciences. | 2 |
| Research: Once a student selects a mentor, they will conduct hands-on research every semester in the area of choice, designing a focused study to complete during the program's duration, in consultation with the faculty mentor. | 3 |
| **Hours** | **9** |
| **Total Hours** | **36** |

| Code | Title | Hours |
|---|---|---|
| **PRESCRIBED ELECTIVES: Students choose 2 courses below** | | |
| | Advanced Assessment and Analysis of Behavior: This course will be focused on the design, methods and interpretation of outcomes research. The topics of this course will include utilization of novel technology to extract rich, ecologically valid behavioral data (e.g., virtual data collection, ecological momentary assessment, biosensors, integration of multimodal data), study design to allow accurate assessment of clinical trial outcomes and analysis of complex designs including latent variable models. At the end of this course, students will understand considerations for outcomes research, appropriate study design to support that research and interpretation of outcomes data. | 3 |
| | Advanced Data Science for Neuroscience: Advanced data science for neuroscience will cover the fundamental principles of machine learning (e.g. data preparation for machine-learning algorithms, bias-variance trade-off, cross-validation to avoid overfitting, etc.), application of data mining algorithms (e.g. ridge/lasso regression, random forests, gradient boosting, etc.), coding for data preparation and implementation of data mining algorithms (e.g. R and/or Python coding) and interpretation of data mining algorithms (e.g. assessing discrimination, variable importance and Shapely scores, partial dependence plots etc.). | 3 |
| | Applied Behavioral Genomics: This course will introduce students to topics related to genetics and its role in behavior and psychiatric disorders. Topics of discussion will include heritability, gene x environment interactions, genetic variation, epigenetics, principles of evolution, methods in the study of genomics, genetic basis of psychiatric disorders, and principles of bioinformatics. Classes will include lectures from experts in the field followed by journal club discussions of recent papers on the topics. | 3 |

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