

# PSYCHOLOGY, PHD

## Program Requirements

The Department of Psychological and Brain Sciences (<https://pbs.jhu.edu/graduate/requirements/>) emphasizes training and experience in the research methods essential to the development of new knowledge in the various sub-fields of psychology. Our core program for doctoral students emphasizes scientific methodology and provides rigorous research training. Each doctoral candidate is expected to become familiar with both a relatively narrowly defined area and a broad spectrum of knowledge related to the student's topic of specialization.

In addition to general university requirements, the Department of Psychological and Brain Sciences has the following regulations:

### Statistics

A thorough understanding of statistics is useful in virtually all research settings. Two statistics courses are required during the first year of graduate training. The normal sequence is AS.200.657 Advanced Statistical Methods during the first semester and AS.200.658 Advanced Research Design and Analysis during the second semester. Students with exceptional statistical training should take two more advanced courses by arrangement with the Director of Graduate Studies. Students are encouraged to take more statistics, as appropriate.

### Fundamentals and Core Topics in PBS

AS.200.613 Fundamentals of Biopsychology, AS.200.617 Fundamentals of Cognitive Psychology, AS.200.654 Psychological & Brain Sciences Core Topics A, and AS.200.655 Psychological & Brain Sciences Core Topics B offer an introduction to the fundamental principles and methods of the psychological & brain sciences. Students will read seminal and contemporary papers in topics that cover the breadth of the field. In addition, students become versed in the careful consideration of data and in formulating written and oral arguments.

### First-Year Research Report

During the first year, the student, together with the faculty advisor, identifies a research project that will provide extended research experience. Normally, the student designs a study as part of a larger ongoing project. A project proposal must be submitted by June 1 of the first year; this proposal introduces the nature of the scientific problem, reviews the relevant literature, and describes the proposed study in detail, together with the anticipated data, means of analysis, and interpretations. A final written version of this report must be submitted by December 15 of the student's second year; ideally, this "first year project" report includes all the information that would be appropriate for submission to a scientific journal.

### Advanced Examination

The Advanced Examination is designed to assess expertise in the student's area of concentration. This examination, which includes both a written and oral part, is graded by a committee of at least two faculty members. The written and oral portions of the advanced examination offer the student an opportunity to demonstrate both in-depth, focused knowledge in their specialty area of study, and also a breadth of knowledge outside of their area of expertise. The student must pass the advanced examination by the beginning of the third year of study.

### Advanced Seminars

Advanced seminars are more specialized in content than a Core Topics course, but are still geared to students with interests both inside and outside the area. Students are required to complete one advanced seminar outside their concentration area. Completion of an additional advanced seminar is strongly recommended.

### Topical Seminars

The Department of Psychological and Brain Sciences offers topical seminars in which one or more faculty members leads seminars on topics of special interest, such as cognitive processes, developmental psycholinguistics, neuro-physiological aspects of behavior, mathematical psychology, and information processing. Through participation in these seminars, students are exposed to findings in subfields of psychology. Topics vary from semester to semester and are determined by the interests of both faculty and graduate students. The format of the seminar is optional, and the course may or may not require formal tests of knowledge. Students are urged to complete topical seminars as appropriate.

### Research Seminars

Students and faculty engaged or interested in research in particular areas organize these seminars. Participants discuss their own research and other current research in the area.

### Teaching Assistantships

Teaching experience is regarded as an important part of the graduate program, and graduate students are required to teach during their program. More details are available in the handbook. The Department Chair, Director of Graduate Studies, Department Administrator, and Academic Program Administrator collaborate to assess the instructional support needs of the department and assign these teaching duties.

Advanced students may apply for a Scholar-Teacher Award Recipient (STAR) Fellowship. This prestigious fellowship provides graduate students an opportunity to grow both as educators and scholars by allowing them to propose, design, and offer an undergraduate seminar course.

### Literature Review

Students complete a written literature review in preparation of the completion of their dissertation. The literature review is modeled on articles appearing in professional journals, and it should be suitable for publication in such a journal. Typically, the review provides a background for the thesis plan, but for some students it may be prepared on a topic other than the one selected for the thesis. The literature review is evaluated by the same committee that will evaluate the thesis plan.

### Thesis Plan

At least one calendar year before receiving the Ph.D. degree, each doctoral candidate must develop a plan for the dissertation research and present the plan before a departmental committee. The thesis plan is a detailed document stating the issue the student wishes to address in a dissertation, the experimental design to be used, and the way the student will interpret the various possible results. In essence, it is a proposal for a research project with predictions and preliminary data, rather than results. The outline of the experiments should be sufficiently clear that the readers will fully understand the procedures; the plan should also include a timeline.

This plan should be completed as soon as possible, but no later than the end of the fourth year. Dissertation research cannot proceed until the

Thesis Plan has formally been approved. With the committee's approval, the student then prepares a dissertation.

## Dissertation

The dissertation represents the student's culminating piece of scholarly work. It establishes the start of a research career and the basis for postgraduate employment. The Graduate Board of the University administers the final oral examination, a defense of the thesis. The doctoral dissertation must be in a form suitable for and worthy of publication.

## Financial Support

Support for graduate students comes from many different sources. Domestic and international students in good standing can expect to receive tuition remission and a stipend.

Stipend support is competitive with that at other institutions and provides sufficient funds to live modestly. Stipends may come from research grants held by faculty members, allowing students to collaborate and be paid as research assistants. The university also provides funds for teaching assistants, as well as special fellowships.

All students are encouraged to apply for national awards, fellowships, and scholarships (e.g., NSF Graduate Fellowships). Our students have been remarkably successful at winning these honors.

The Department of Psychological and Brain Sciences is also affiliated with two diverse training programs (<http://krieger.jhu.edu/pbs/graduate/training-programs-and-grants/>) supported by the Center for Hearing and Balance (<https://jhu-chb.org/opportunities/>) and the National Institute on Aging (<https://www.nia.nih.gov/research/training/>), including the NIA-supported training grant titled "Research Training in Age-Related Cognitive Disorders." Qualified graduate students are encouraged to discuss relevant and appropriate training grant applications with their advisors. Stipend and tuition remission may be provided to accepted applicants through these and other training programs.

*For further information on graduate study in psychology, contact the Academic Program Administrator ([ezurbuc1@jhu.edu](mailto:ezurbuc1@jhu.edu)) for the Department of Psychological and Brain Sciences (<https://pbs.jhu.edu/>).*

## Master of Arts in Psychology

A student who has been admitted into the Ph.D. program can earn a Master of Arts degree in partial fulfillment of the requirements for the Ph.D. degree. Normally, candidates for the Ph.D. degree in psychology will qualify for the M.A. degree at the end of their second year, after having completed two area seminars and at least two courses in psychological research design and/or advanced statistics, provided that their performance is of the quality judged satisfactory for the M.A. level. There is no terminal master's program.