Cognitive Science graduate programs handbook

Fall 2023 edition (Updated Sep 6)

This document describes the Cognitive Science graduate program requirements and policies, covering both PhD and MA programs. This handbook is subject to revision; always ensure that the current version is referenced. It is each student's responsibility to educate themselves on these policies and to seek guidance as appropriate. Links to JHU and KSAS policies are provided where relevant, but may not be exhaustively described here. Questions about applying policy should be addressed to the Chair, Director of Graduate Studies (DGS), the Academic Program coordinator, and/or other administrative staff as appropriate.

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Cognitive Science Department Overview

The JHU Department of Cognitive Science offers BA, MA, and PhD degrees in Cognitive Science, as well as an undergraduate minor in linguistics. Graduate students in the **Department of Cognitive Science** are provided theoretically oriented research and training opportunities as they approach the study of the mind and brain from multiple perspectives, with a particular focus on language/linguistics and human vision. Faculty are drawn from a range of fields including Cognitive Science itself, Linguistics, Neuroscience, Psychology, and Computer Science.

Space, location, resources

The Cognitive Science Department is located in Krieger Hall on the first and second levels. Faculty and Graduate student offices, as well as labs, are spread across these levels, generally from rooms 112-155 on the first floor and rooms 230-249 on the second floor. The departmental office and mailroom is in Krieger 237/237A, and the primary common space/kitchen is in Krieger 142. Printers can be found in the mailroom (Krieger 237) and in Krieger 142.

- An up-to-date full departmental directory is released once per semester (see also https://cogsci.jhu.edu/people/).
- PhD students receive an office assignment shared with other students. MA students are typically able to receive office space in their advisor's lab; consult your advisor.
- Graduate students receive keys to their office space, affiliated lab(s), departmental common spaces (including classrooms), and the building.

The department manages 3 classrooms (and many labs have their own meeting room). To request use of these classrooms, use: https://krescal.jhu.edu/cogsci. (A number of other departmental resources can be scheduled via this app as well.)

- Krieger 111 is a medium-size classroom that is also the normal location for departmental public talks (e.g. colloquia, defenses).
- Krieger 134a is a smaller classroom that is also the normal location for departmental brown bags.
- Krieger 234c is a seminar room.

People and organizational structure

Relevant faculty leadership roles:

- **The Department Chair** is a rotating position occupied by faculty members of Full Professor rank for four-year terms. The chair is responsible for a wide range of decision-making throughout the department. Current Chair (AY 2023-2024): Geraldine Legendre, legendre@jhu.edu.
- The **Director of Graduate Studies (DGS)** is a rotating faculty position usually occupied by a tenured faculty member who is responsible for decision-making about aspects of the graduate program, including placing out of courses, day-to-day decisions about requirement satisfaction, etc. Current DGS (AY 2023-2024): Kyle Rawlins, kgr@jhu.edu.

- The **Graduate Travel Chair** approves requests to use students' research budgets for travel or other purposes (see forms in Appendix 1 for the procedure). Current chair (AY 2023-2024): Leyla Isik, lisik@jhu.edu.
- The **Diversity Advocate** leads diversity, equity, and inclusion efforts in the department, serves as liaison to KSAS diversity initiatives, and is Faculty Chair of the Department's Diversity and Representation Committee https://cogsci.jhu.edu/about/diversity-and-representation/. Current chair (AY 2023-2024): Barbara Landau, landau@jhu.edu.
- For the full list of faculty and faculty roles, see: https://cogsci.jhu.edu/people/#filter=.faculty.

If you have concerns, or questions that require assistance from faculty beyond your advisor, you are strongly encouraged to discuss these with the DGS. You may also consult the Department Chair.

Administrative staff (https://cogsci.jhu.edu/people/#filter=.administrative-staff):

- Sarah Ciotola (sciotol3@jhu.edu) is the **Department Administrative Manager**, and has oversight over all administrative aspects of the department.
- Chamera Sampson (csampso7@jh.edu) is the **Academic Program Coordinator**, and manages many administrative aspects of the graduate program including student records, and can be consulted for questions about graduate programs and procedures.
- Sue Potterfield (spotter2@jhu.edu) is the **Department Budget Analyst**, and interacts with graduate students for issues of payroll, grant applications, and research/travel budget usage.
- IT support requests can be made via Brain-IT@jhu.edu.

Key people in the Krieger School of Arts and Sciences (KSAS)

- Renee Eastwood (rseitz5@jhu.edu) is the **Assistant Dean for Graduate and Postdoctoral Academic and Student Affairs**. She is responsible for the leadership and administration of graduate affairs and admissions, and also works closely with individual graduate students to triage, manage, and resolve issues impacting well-being and academic success.
- For further information on the structure of KSAS and the KSAS dean's office, see https://krieger.jhu.edu/people/dean-leadership/. The Cognitive Science Department is one of the Natural Sciences within KSAS.

Other relevant administrative entities at JHU:

- Human Subjects Research in KSAS is overseen by the Homewood Institutional Review Board (HIRB): https://homewoodirb.jhu.edu/ , with the exception of fMRI research which is overseen by the JHMI IRB:
- https://www.hopkinsmedicine.org/institutional_review_board/. Students doing Human Subjects Research (and adjacent work) will be required to obtain and maintain training certificates via the CITI program, and all Human Subjects Research must involve a research protocol approved by the HIRB with a faculty member as PI. Please consult with your advisor(s) for further details about specific protocols that they or others administer, and how to obtain CITI training.
- The JHU Office of International Services (OIS) provides immigration, visa, and travel guidance to JHU affiliates, including international graduate students. OIS specifically assists with, and monitors the status of, visa and related paperwork for international graduate students. New students should consult:

https://ois.jhu.edu/Students/New_Students/index.html. Current F-1 and J-1 visa students should consult https://ois.jhu.edu/Students/Current_F1_Students/ and https://ois.jhu.edu/Students/Current_J1_Students/ respectively.

Department Climate, Diversity and Representation

The department is an environment that must be free of harassment and discrimination. All department members are expected to abide by the JHU policies on discrimination and harassment, which you can read about here. The department is committed to ensuring a safe, friendly, and accepting environment for everybody. We will not tolerate any verbal or physical harassment or discrimination. If you notice someone being harassed, or are harassed yourself, you can report this to your advisor, the DGS, Chair, another trusted faculty member in the department, or see the university resources below. **Please keep in mind that all faculty are considered "Responsible Employees" meaning they are required to report all incidents of sexual misconduct to the JHU Title IX coordinator. If you prefer to talk to a confidential resource, there are several you can find here.** In some scenarios, graduate students may be considered responsible employees, and should be aware of their obligations in such cases. See also the section Raising and Reporting Issues.

In 2020, the department founded a Diversity and Representation committee. The committee meets monthly and is made up of students, faculty, and staff. The committee has several key goals, including increasing representation and support for individuals from minoritized groups at every level within the department; making the department climate more welcoming and safer for everyone, especially underrepresented groups in science; and taking school-wide and university-wide action to support anti-racist groups and policies. To find out more or get involved, you can visit the departmental website: https://cogsci.jhu.edu/about/diversity-and-representation/.

PhD Program Requirements

Credit and registration requirements

Graduate students have credit requirements that must be maintained each semester (new as of S23). Full-time / resident students must be enrolled in a minimum of 9.0 credits, and a maximum of 20. The exact makeup of this depends on the stage in the program, and may consist of research/directed reading credits (at an amount determined between advisor and student), standard courses, and other required courses. In earlier parts of the PhD program, students typically focus on courses; in later parts students should aim for 20 credits total, and most of this will be research credits. MA credit allocations depend on track. General registration notes and credit requirements:

- All resident students must, for every semester, enroll in the 1-credit course, *Current Advances in Cognitive Science*, AS.050.850 (01). This course corresponds to attendance and participation in departmental colloquia and Friday brown bag talks.
- All students who are TAing must enroll in the *Teaching Practicum* course number and section corresponding to the specific course that they are TAing for. CogSci graduate Teaching Practicum courses are sections of the course number AS.050.849, with one section for each faculty instructor. These courses are 3 credits.

- For most or all semesters, graduate students are enrolled in a Directed Readings or a Research course with the advisor for their current project; the credit counts for these are on a sliding scale and may be adjusted as necessary. In the last two years of the PhD program, students will typically adjust the number of credits allocated to research in order to reach a total credit count of 20.
    - Graduate level *Directed Readings* courses in CogSci are sections of the course number AS.050.800, with a different section for each faculty member. The credit count for these courses can range from 1-10 as appropriate. For PhD students, these may be rarely appropriate, typically only in earlier phases of the program.
    - Graduate level *Research in Cognitive Science* courses are sections of the course number AS.050.837, with a different section for each faculty member. The credit count for these courses can range from 1-20 as appropriate.

Non-resident students should enroll in (only) AS.910.600, Non-Resident Status, for 9 credits.

PhD course requirements

See the program checklists (Appendix 1) for precise information on course requirements beyond the general credit requirement. Cognitive Science PhD students take a number of both Depth and Breadth courses, typically during the first two years of the program. The exact implementation differs between the core track and the computational cognitive science track.

In *breadth courses*, students develop the ability to understand and critically evaluate work in the various sub-disciplines of cognitive science by completing courses in the areas of cognitive psychology/neuropsychology, computation, linguistics, philosophy, and cognitive neuroscience. Students may place out of breadth courses based on prior equivalent coursework or based on examination. In *depth courses,* students become expert in their primary area of research interest and are prepared so that they will be competitive for academic positions in one of the traditional disciplines. Students take several advanced courses or participate in seminars/lab meetings that the student, in conjunction with his/her advisory committee, determines to be important for achieving expertise in a chosen research area and marketplace competitiveness. Students must also take the university's Responsible Conduct of Research (AS.360.625) course, two instances of AS.050.860 "Professional Seminar in Cognitive Science", and register for research courses and teaching practicum courses as applicable (See below).

General track breadth and integration requirements: Cognitive Neuroscience (1 course), Philosophy (1 course in philosophy of mind, language, or science), Cognitive (Neuro)Psychology (2 courses, including AS.200.657 Adv. Statistical Methods previously AS.200.314), Computation (2 courses), Linguistics (2 courses). Integration: AS.050.626 Foundations of Cognitive Science.

Computational track breadth and integration requirements: 3 – 4 courses that collectively develop sophistication in theoretical and (human) experimental approaches to cognitive science, cover both vision and language. In addition, computational track students take at least 3 graduate courses covering basic issues in computation, machine learning, AI, etc. Integration: AS.050.626 Foundations of Cognitive Science.

Depth requirements: 6-8 courses, Number and scope of courses selected in conjunction with advisor(s) to achieve depth in CCS. Lab meetings and seminars (CogSci 800-level courses) may be used to fulfill this requirement, and will typically form the bulk of depth classes.

Students may place out of coursework that they have already taken in a prior degree, with advisor and DGS approval. Send a transcript and course information (e.g. syllabi) to the Director of Graduate Studies (CC advisor) identifying which course(s) you feel may satisfy one or more PhD requirements with a brief rationale. If approved, the academic coordinator should be given the written approval to add to your file.

Participation in departmental events

PhD students are expected to attend public departmental events (colloquium talks, departmental brown bags, job candidate events when relevant). All students must register for the departmental colloquium course every semester. Students also typically participate in one or more research lab meetings every semester, each of which also should be registered for.

PhD research requirements

This section outlines the major PhD research requirements: the first and second project papers, the dissertation proposal, and the dissertation itself. During all semesters, PhD students should be registered in a research course number corresponding to their current main research project (typically a section of AS.050.837 with a primary advisor for that project).

1. **First and second project papers**

   During the first three years of the PhD program, students produce two major research papers. These papers, which are respectively due November 1st of the second year and May 1st of the third year, draw on two different research methodologies, and often involve different advisors. The second project research should begin by May 1st of the second year. Each paper is evaluated by two readers following this submission deadline.

   Goals. The two research papers consist of research that is of the caliber to be eventually published in the relevant subareas of Cognitive Science, and are typically presented at conferences and often lead to separate journal publications. By the end of each project, the student should be (i) familiar with one or more research methodology in Cognitive Science at an advanced level, (ii) familiar with a broad body of research in the relevant subarea of Cognitive Science, (iii) familiar with the key research relating to the specific project topic, (iv) familiar with the culture and conventions of the subarea, and (iv) have carried out a research project using a specific method in the relevant area. The project need not itself be published by the deadline, but the aim is that it be of sufficient caliber that it could develop to a publication. Typically, the project will be presented at one or more conferences in the subarea, often before the project deadline.

   Advising and multiple methods. The two projects should involve distinct methods in cognitive science, whether "method" is broadly construed. Examples of what might be considered methods include (far from exhaustive): psychological theory involving one or

more types of behavioral experiments, cognitive neuroscience, cognitive development or language acquisition, theoretical linguistics, linguistic fieldwork, computational modeling. Please consult with your advisor(s) and the Director of Graduate Studies if you have questions about what constitutes a distinct method. Typically, research areas in cognitive science may involve distinct methods and so the projects may involve multiple research areas, but this is not required. For example, a student might do a research project in computational phonology, and then follow that with a project in theoretical phonology. It is permissible (and often recommended) for projects to be on related topics, as long as they fulfill the multiple-methods requirement and the project advisors support the topics.

Correspondingly each project must have a primary advisor as well as a second reader; they may be multiply advised. The responsibility for choosing the second reader is with the primary advisor, in consultation with the student. Because faculty have specific areas of methodological expertise, it is typical (and again, often recommended) that the two projects involve distinct primary advisors. In some cases, a second reader may be outside the department (typically a faculty member at JHU with a secondary appointment in Cognitive Science). In some cases, a project advisor can be outside the department, if this is approved by the students' primary advisor and Director of Graduate Studies. At least one reader must be a Cognitive Science department member.

The first project's primary advisor is typically determined during the admissions process, and research begins immediately on joining the program. It is highly recommended that during a students' third semester, they begin considering both what the method for their second project might be and who the advisor could be (in consultation with their primary advisor), and that they begin approaching potential second project advisors.

Project completion process. The first and second research projects each involve a "deliverable" that takes the form of a written paper. The format and content of this paper are highly dependent on the research area and research method, so it is highly recommended that students and advisors establish expectations about format early on. One typical strategy is to adopt a format that would be typical of published work on the topic; for example, experimental papers in many research areas have a highly regimented format. This paper is what should be submitted by the project deadline, and it is expected that the paper submitted at this point will be a polished piece of work that already incorporates major pieces of feedback from the primary advisor. Following submission, the primary advisor and at least one secondary reader will then evaluate the paper, providing either written or oral feedback and potentially requesting further edits. The faculty have set a goal of delivering outcomes within 30 days of submission. The possible passing outcomes are Revisions Required, or Pass. If revisions are required (the modal outcome), the student and readers should come to an agreement on what the editing timeline is in order to move the project to a Pass, and regardless, should communicate the outcome to the Graduate Program Director. The first and second project do not require a defense component, but some advisors may choose to include an oral defense or presentation to the readers as part of the evaluation process.

Extension policy. If a student is unable to meet a paper deadline, a formal extension is required. The student must seek written (email) permission from their advisor. The request must include a rationale for the extension request, a proposed new deadline, and a specific

description of the deliverable (see Project completion process) that will be submitted by that date. If approved, a copy must be sent to the Director of Graduate Studies and the Academic Program Coordinator. The DGS must grant secondary approval.

Reporting. The project paper outcomes and readers must be reported by the primary advisor to the Director of Graduate Studies and the Academic Program Coordinator to be recorded in the student's file.

2. Dissertation phase (Years 4-5)

Together, the fourth and fifth year together form a larger research arc where a student defines and carries out a dissertation project; this project culminates in an oral defense and, of course, the dissertation itself. Dissertation often research often begins well before year 4, and in many cases incorporates aspects of the first two projects; it is highly recommended that students and advisors begin considering the shape of the dissertation project long before year 4.

There is no single model for what a dissertation project is. Broadly, across research areas covered in Cognitive Science, a dissertation demonstrates the writer's ability to make a substantial, independent, and novel research contribution to their specialty, as well as demonstrating (i) the ability to critically analyze literature and prior research in the area in relation to the novel contribution, (ii) to develop and apply deep expertise in research methods of the topic area, and (iii) to verify and support arguments and research claims by the scholarly standards of the field(s) in question. It is highly recommended that early in the process, students read both relevant dissertations completed in the CogSci department, and dissertations that have been important outside the department in their field(s) of research. Research that comprises a dissertation is significant enough to be published, and the research methods and content typically determine a student's career for many years to come. It should represent the best work yet of the student.

2-a. Dissertation proposal (Due May 1, year 4)

By May 1 of their fourth year, students complete and defend a dissertation proposal under the supervision of one or more faculty members expected to be the dissertation advisor(s). Typically, there is a primary advisor, but if the dissertation is expected to be co-advised, it is recommended that all co-advisors be involved as advisors at the dissertation proposal stage.

Content. The content of a dissertation proposal is highly dependent on research area and methodology, since Cognitive Science covers multiple traditional disciplinary research areas with their own conventions and expectations. The one over-arching requirement is that *the dissertation proposal should encapsulated and describe a viable dissertation project*, whatever that may be. (See **Goals** (below) for more details.) For this reason, it is highly recommended that students and advisors establish expectations for the content of this document early, as expectations vary quite a bit across advisors.

Goals. The goals of a dissertation proposal are (i) to demonstrate that the student has developed a viable dissertation project in their specific research area(s), (ii) to demonstrate that the student has sufficient command of the research literature and relevant methods

needed to carry out this project, and (iii) to establish that the project can be carried out within the planned timeframe. The proposal document should typically cover, at least in brief, all planned components of the dissertation, and should include a planned timeline for completion of remaining pieces of the dissertation. It is *not* expected that at the time of the proposal, all, or even most, of the supporting research will be complete, as long as there is a viable plan. As noted above, the exact content and supporting work needed to meet goals (i-iii) may vary quite widely between research areas, research methods, and advisors; and so establishing expectations around specific goals early is very important. For example, in many areas that involve experimental data, one year is not sufficient time to carry out the full arc of designing, running, and interpreting a full suite of experiments for a dissertation, and so therefore, pilot data or multiple complete experiments may be expected at the time of the dissertation proposal.

Proposal format. The dissertation proposal consists of a written document in the style and format appropriate for the research topic and method. Because expectations vary so widely, the program does not impose any standardized format for this document. Examples from the research areas involved, and from past students in the relevant labs, may be highly useful as models.

Proposal defense. The submission of a polished proposal document to the advisor is followed by an oral proposal defense. The May 1 deadline is for the proposal defense. The defense committee consists of at least three researchers in the relevant area, two of whom should be faculty members in Cognitive Science. If the dissertation is expected to involve an outside advisor in some capacity, they are often brought in at this stage. (Because the GBO requires outside members, even if there is no advising expectation this can a good checkpoint to gain feedback from potential outside GBO committee members who have relevant expertise.)

Reporting. The outcome and proposal defense committee members must be reported by the advisor to the Director of Graduate Studies and the Academic Program Coordinator to be recorded.

2-b. The dissertation defense / Graduate Board Orals defense

One culmination of the dissertation research is the dissertation defense. In Cognitive Science, the defense has two parts.

Public presentation. First, there is an open public presentation of the dissertation research, involving a 45-minute talk followed by a Q&A session.

Graduate Board Orals Exam. Following the public presentation, the student then engages in a closed-door oral defense with their dissertation committee. In Cognitive Science, the closed defense follows the structure of a JHU Graduate Board Orals (GBO) exam, under the "Final Examination" rules. For more details, please see: https://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams/. The exam usually lasts two hours. At the end of the exam, the committee makes a determination of the GBO outcome, and provides requests or recommendations to the student for further revisions before filing.

The GBO rules require a committee of five faculty, including 2 faculty from "inside" the department s, and 2 faculty from "outside" the department. The fifth member may be from "inside" or "outside" the department. One of the outside members must be eligible to act as the chair for the examination (distinct from the dissertation advisor) and must be a tenured senior faculty member at JHU. Please consult the above-linked website, the Graduate Program Coordinator, the Director of Graduate Studies, and your advisor(s) for the most up-to-date information about the details and requirements of this. The student is *not* responsible for the logistics of organizing this event, or choosing committee members, though it is expected that they will be consulted during this process. *The GBO Form providing committee information, defense date, and location must be signed (by the Department Chair) and submitted by the Graduate Program Coordinator no later than three weeks before the targeted defense date. In cases where someone from external to Hopkins is on the proposed committee, the GBO Form must be submitted no later than four weeks before the targeted defense date and additional documentation is required (CV, justification for seeking expertise outside Hopkins, etc.). The Grad Board chooses the GBO chair from the "outside" members.* The GBO requirements impose certain hard requirements about when the committee receives the dissertation document as well as a Reader's Letter in advance of the defense; it is recommended that the student and advisor(s) familiarize themselves with these requirements well in advance of scheduling the defense.

Reporting. The committee reports the outcome on a signed GBO Form and delivers it to the care of the Graduate Program Coordinator to be submitted to the Graduate Board.

Degree conferral deadlines. The exact university deadlines for defending (as well as filing the dissertation) are variable from year to year; the Graduate Program Coordinator tracks the current deadlines and can provide further details on timing as well as financial implications and impact on student health insurance coverage periods.

2-c. The Dissertation Document

As noted above, the exact format and content of a dissertation varies between fields and subfields covered in cognitive science. Students and advisors should consult early in the dissertation process to better understand what exactly the expectations are, beyond the general expectations for dissertation projects outlined in the introduction to **section 2** above. It is also highly recommended that students read past dissertations in their research areas and labs to gain a better sense for what a dissertation comprises. Many past Cognitive Science dissertations at JHU can be found by searching for "Cognitive Science" in the library's JScholarship archive (by default, all dissertations are published here within several months of filing): https://jscholarship.library.jhu.edu/handle/1774.2/838/discover. Recent and classic dissertations in many areas of Cognitive Science are often publicly available, for example on the author's webpage, or standard archives for the field, e.g. LingBuzz (https://ling.auf.net/) within linguistics; they are also often available via databases that the Sheridan Library subscribes to, including ProQuest: https://databases.library.jhu.edu/databases/database/JHU06249. Advisors can typically provide specific recommendations for reading if needed.

Format. For information about the scholarly structure of a dissertation, expected bibliographic practices in a specific subfield, etc., please consult your advisor(s). For

formatting requirements for filing, please see the filing requirements here: https://www.library.jhu.edu/library-services/electronic-theses-dissertations/formatting-requirements/. Recent PhD students may be a good resource for practical help on how to comply with these requirements.

Submission and Deadlines. The dissertation document must be complete in advance of the GBO exam; please consult the GBO requirements and the Graduate Program Coordinator for exact details. A complete draft of the dissertation will typically exist 1-2 months in advance of a targeted defense date, with substantial portions of it draft-complete much before this; revisions are always necessary and multiple drafts should be expected during the process.

Following the defense, after any required edits from the dissertation committee are made, the student files their dissertation with the university. Once filing is completed, they have fulfilled the final requirement for a PhD. This process is managed by the Sheridan Library; for more information, please see: https://www.library.jhu.edu/library-services/electronic-theses-dissertations/.

As noted above, exact deadlines for filing the dissertation vary somewhat from year to year, and the Graduate Program Coordinator can be consulted for exact details.

Teaching Assistantships

Students participate in a Teaching Practicum (e.g. act as a Teaching Assistant/TA) three to five semesters (depending upon exact funding source; 5 semesters is the typical number). The teaching practicum provides an opportunity to gain familiarity with classroom teaching in academia, and is a crucial part of the PhD program's training.

Specific policies:

- Students are not required to TA in their first semester (in some exceptional circumstances, incoming students may be offered an opportunity to do this voluntarily, and receive a TA relief in their second semester instead.) Students do not typically TA in their final year.
- The TA assignment process typically happens about a month before the beginning of a semester. Students are asked their preferences, and the department does its best to accommodate these, though no guarantees can be made.
- When relevant, TAing a course counts as taking it for course program requirements.
- Each semester that a student is a TA, they must register for a "TA Practicum" course with the instructor of the course. CogSci graduate Teaching Practicum courses are sections of the course number AS.050.849, with one section for each faculty instructor.
- Before TAing for the first time, JHU requires students to participate in a TA orientation run by the Center for Teaching Excellence and Innovation (CTEI) , usually offered both synchronously and asynchronously in late August and mid- January. Exact details will be provided via the Academic Program Coordinator approximately a month before the registration deadline.

Funding

The department provides competitive levels of funding for PhD students. This funding includes full tuition, student health insurance coverage, and a 12-month stipend. PhD students are also given access to an annual travel/research allowance for eligible expenses. Assuming satisfactory progress toward the Ph.D. degree and continued funding levels, PhD students may expect this support to continue for five years (10 semesters).

During the five years of support, graduate students are expected to dedicate their full time and attention to coursework, teaching, research, etc. within the Department of Cognitive Science. Additionally, they are expected to apply for any outside funding (e.g. NSF fellowship, etc.) for which they are eligible as early as their first semester. Students who receive external funding are to report this information to the Chair and administrative staff to work out an overall package.

Students may not 'defer' departmental funding if they receive external funding in years 1-5. Beyond the funding period, students and/or advisors are responsible for nonresident tuition and student health insurance premiums.

See https://cogsci.jhu.edu/graduate/phd-program/funding/ for potential funding opportunities.

Sample PhD Program

See: https://cogsci.jhu.edu/graduate/phd-program/sample-program/.

MA Program Requirements

See the program checklists (Appendix 1) for precise information. The Cognitive Science has three forms of MA degrees, an MA received as part of the PhD program, and two standalone MA programs with different focuses on coursework vs research. All tracks receive an MA in Cognitive Science.

MA degree during the PhD program

After completion of the first research project and sufficient coursework (see the checklist in appendix 1 for details), PhD students are eligible for an MA degree. This is sometimes called an "MA-along-the-way" degree. This is typically received between the 3rd and the 5th semester, depending on coursework. The academic coordinator checks in with students about their progress midway through semesters where a student may be eligible, and informs them about exact conferral deadlines.

Course track MA degree

The MA Course Track is 3-term standalone MA program with requirements focusing on coursework. Students take graduate courses in advanced topics, research seminars, and directed readings or research coursework with their advisor. See the checklist in Appendix 1 for requirement details. MA course track students take 7 CogSci graduate courses (600-800 level, with permission up to four of these may be at a lower level); two 800-level lab or research seminars, directed readings or

research credits, and AS.360.625 Responsible Conduct of Research (RCR)**.** The exact course plan will depend on the student's goals, and should be constructed in consultation with the advisor.

Capstone requirement: At the end of the course track program, MA students produce a portfolio of accomplishments from the program (e.g., course assignments, seminar papers) overseen by the faculty mentor, prepare a reading list and set of discussion questions, and present what has been learned from the year of study at an Oral Presentation supervised by your mentor and another faculty member. Consult with your faculty mentor(s) about additional requirements/expectations.

Research track MA degree

The MA Research track is a 3-term standalone MA program with some course requirements, but a focus on carrying out a graduate-level research project over the course of the program. Students are enrolled in research credits throughout the course of the program, take research seminars, and take a number of additional graduate classes typically concentrated during the first semester. See the checklist in Appendix 1 for requirement details. Research track students take a formal methods or statistics course, two lab or research seminars (CogSci 800-level courses), three additional graduate courses, research credits for all enrolled terms, and AS.360.625 Responsible Conduct of Research (RCR). The exact course plan will depend on the student's goals and research project, and should be constructed in consultation with the advisor. Research track students begin a research project on entry to the program and continue working on this throughout.

Capstone requirement: Over the course of the program, MA students develop a specific research project, culminating in the writing of a research paper that is approved by the faculty mentor(s) prior to an oral defense of the research. The defense must be supervised by your mentor and one other faculty member. Typically, the overall project is determined at the very beginning of the program or before matriculation. Consult with your faculty mentor(s) about requirements and expectations.

Mentorship and evaluation

Advisors & Supervisors

Advisors: All students in the program have at least one primary advisor. Occasionally, a student will have two primary advisors. During the course of the program, most students work with multiple faculty. For example, the first and second research projects are typically supervised by different faculty.

Students should expect advisor(s) to treat them with respect; meet with them regularly; set clear goals in consultation with the advisee; respond promptly to advisee emails; provide timely feedback on the advisee's work (e.g., drafts of papers, conference abstracts); and provide advice on research and professional development. Exactly what constitutes meeting *regularly*, responding *promptly*, and providing *timely* feedback will necessarily vary across students and advisors. Advisees should work with their advisor(s) to clarify expectations on these matters.

Changing advisors: Students may want or need to change primary advisors at some point in their graduate career, whether because of a change in subarea, or other reasons; students may also wish to change from a single-advising situation to a dual-advising situation, or the reverse. A student may,

with permission of the parties concerned, change or add an advisor. This is a major change, not undertaken lightly, and it is highly recommended that it be discussed well in advance with all concerned parties, as well as the DGS. Faculty members' ability to serve as an advisor is constrained by their available time and resources, and potential advisors will typically have a well-delimited range of research that they are able to advise. Consequently, students considering this should make efforts to become familiar with the work of faculty other than their primary advisor--for example, by attending a potential advisor's lab meetings, working on a second research project with potential secondary advisors, etc. Learning about potential advisors' research will also help a student to understand what knowledge and skills to acquire before they would be ready to work with a new advisor, and what research expectations that advisor might have.

Project Supervisors: It may be appropriate for a faculty member outside our department to supervise a first or second paper/project; however, the student must also have an internal project co-supervisor who has a primary appointment in the department. The internal co-supervisor is necessary as they will have a firm grasp of program expectations and standards.

Reporting/Discussing Advising Concerns: Students who have concerns that a faculty member is not fully meeting their responsibilities may discuss those concerns with the DGS. Should the DGS be involved in the situation or be temporarily unavailable, the student may discuss the matter directly with the Chair. Students should consult with the Diversity Chair for diversity-related matters. Students may consult with other faculty members if they prefer, but it is recommended to keep the DGS and/or Chair appraised. Outside the department, students may contact the KSAS Assistant Dean for Graduate and Postdoctoral Academic and Student Affairs, as well as the JHU Ombuds Office. See the section "Raising and Reporting Issues" for more information.

Also see Statement of Rights and Responsibilities of PhD Students, PhD Mentoring Policies and Resources, PhD Professional Development Policies and Resources, and Common Questions Regarding PhD Advisors and Mentoring. These policies will be presented to new students and faculty.

Student Evaluation and Biannual Reviews

JHU requires all doctoral programs to comprehensively review their students at least once annually. Our department reviews its PhD students twice annually, once at the end of each semester. There are three required phases: Self-Evaluation, (2) Written Faculty Feedback, and (3) Post-Feedback Meetings.

1. First, each student is required to submit a self-evaluation form to their advisor(s), DGS, and academic staff.
2. Faculty convene to discuss each student's self-evaluation, research, writing, classes and grades, TAing, colloquia and brown bag talk participation, departmental service, program milestones, professional development, etc. Respective advisor(s) in concert with the DGS develop a tailored letter for each student to convey feedback on these areas. The evaluation letter becomes a part of the student's academic record.
3. Students are required to schedule a synchronous meeting with their advisor(s) to discuss the letter, then must then notify the academic staff. An email to the academic staff, copying the advisor(s) will suffice.

The faculty want all graduate students to succeed in the program and try to identify and address potential problems as early as possible. However, students who fail to achieve a minimum level of performance and participation in the program may be placed on pre-probation or probation (see section on Pre-Probation, Probation, Withdrawal, and Dismissal). While these statuses may be assigned any time of the year, they are typically assessed during the biannual review process. In making these decisions, particularly that of dismissal, the program will take into consideration extenuating circumstances beyond the student's control.

See also the JHU PhD Professional Development Policies and Resources and the Academic Review Policy.

Pre-Probation, Probation, Withdrawal, and Dismissal Policies

Students who are not meeting expectations may be removed from the program; the processes here follow Krieger School of Arts and Sciences processes: https://krieger.jhu.edu/hwgradaffairs/wp-content/uploads/sites/35/2019/11/2018-Homewood-Graduate-Student-Probation-Funding-Withdrawal-and-Dismissal-Policy.pdf. The following, with the exception of the discussion of "pre-probation", is intended as a brief summary of KSAS procedure, rather than a definitive / detailed description; please consult KSAS policy for the latter.

If it is determined that a graduate student has failed to meet performance requirements as dictated by their program and/or their advisor(s), they may be placed on probation. Grounds for probation include coursework, TAing, research, or a combination thereof. A student on probation will be notified in writing, and requested to confirm that they have received this notification. If a probation letter is issued at the same time as a semester evaluation, the student will receive both a standard evaluation letter and a probation letter. A probation letter will indicate the reasons for probation, the corrective measures necessary to have the probation status, and the timing of probation; see the document linked above for further details on what exactly must be in such a letter, constraints on the timing, etc. If the student fails to meet the probation criteria at the end of the timeframe indicated, they may be dismissed. Both probation and its outcome may be appealed; see the KSAS document linked above for details. In unusual circumstances, dismissal without probation is possible, again see the linked document.

Within Cognitive Science, the department occasionally indicates in an evaluation letter (or other formal written communication) that a student is at risk of being put on probation. This is referred to as "pre-probation". This is not a formal KSAS category, but rather a department-specific attempt to ensure that students are aware of unsatisfactory performance well in advance of more formal procedures. When a student is informed of a pre-probation decision, the communication will also provide a timeframe and recommended corrective measure(s).

Probation and pre-probation status are confidential, and regardless of outcome, do not appear in any public-facing student records, such as transcripts.

Raising and reporting issues

At several points in this document, a number of scenarios where a student may need or what to discuss problems, both within the department, and more general. This section consolidates discussion of these issues and highlights departmental, KSAS, and university resources. See also the section " Department Climate, Diversity and Representation".

Issues and problems

Many scenarios may benefit from discussion with or intervention by an outside party; in some cases reporting may be legally required (see discussion below of "Responsible Employees"). This includes situations involving peers, situations involving advisors or supervisors, or situations witnessed by a student. A non-exhaustive list of situations where a student may want to report an issue follows:

- Disagreements with an advisor or other supervisor, including about research expectations
- Communication failures involving an advisor or other supervisor (e.g. failure to respond to communication, inconsistent expectations, etc.)
- Harassment or abuse
- Retaliation for a report or complaint
- Sexual harassment
- Situations that may lead to self-harm

Who to talk to

Within the department, the typical reporting chain for problems is, (i) immediately supervising faculty (e.g. primary advisor(s), instructor of record for TA/course situations, research project advisor), (ii) Director of Graduate Studies, and then (iii) Departmental Chair. If a student does not feel comfortable with a step in this chain for any reason (for example, the faculty member in question is part of the situation being reported), the reporter may skip that step. Faculty members should be expected to keep confidentiality for reports if requested, with the important caveat that all department members in any supervisory position are considered "Responsible Employees" meaning they are required to report all incidents of sexual misconduct to the JHU Title IX coordinator. In some scenarios, graduate students may be considered Responsible Employees.

- https://oie.jhu.edu/responsible-employee-guidance/index

Within the Krieger School of Arts and Sciences, issues that are not resolvable by department members in the above chain, including for conflict of interest reasons, may be brought to the Assistant Dean for Graduate and Postdoctoral Academic and Student Affairs, Renee Eastwood (rseitz5@jhu.edu). Dean Eastwood is also a Responsible Employee.

The JHU Ombuds office (Annalisa Peterson, Ombuds) handles doctoral and postdoctoral issues, and can maintain full confidentiality except in cases of self-harm or child abuse/neglect. This includes confidentiality for Title IX-related reports. They handle a range of situations, from

dissertation issues to interpersonal conflicts; navigating academic or research expectations to mistreatment; or questions or concerns about JHU policy.

- https://www.jhu.edu/ombuds-office/services/role-ethical-principles/
- JHU Ombuds office consultations can be scheduled via: https://www.jhu.edu/ombuds-office/schedule-a-consultation/

Other confidential resources may be found at: https://oie.jhu.edu/confidential-resources/

Appendix 1: forms and supplementary policies

Currently a folder of relevant documents:
https://livejohnshopkins-my.sharepoint.com/:f:/g/personal/krawlin2_jh_edu/Eg-u1hORSqhKqDzAi2ERkPkBYecoRnMzMyLFsIO1le0gBA?e=Itx3Dc

Program requirements forms: for substantive requirement changes, may use any form that has been released while you were a student.

See also:

- https://cogsci.jhu.edu/about/room-and-travel-resources/
- Program requirement forms are also available via https://cogsci.jhu.edu/graduate/