Department of Cognitive, Linguistic, and Psychological Sciences





Integrating the Study of Mind, Brain, Behavior, and Language

# Graduate Manual for the Ph.D. Programs in: Cognitive Science Psychology Linguistics

With latest updates approved by the CLPS faculty on September 13, 2023

The requirements, guidelines, and deadlines described in this manual were established by the CLPS faculty in accordance with Graduate School policy. They are designed to ensure that students make steady progress toward their Ph.D. Exceptions to requirements and procedures may be granted by action of the DGS and the Department Chair, or by the faculty as a whole. The general rules and regulations set forth by the Graduate School are available at

<u>http://www.brown.edu/academics/gradschool/academics/rules-regulations/graduate-school-handbook</u>. Graduate students are strongly encouraged to familiarize themselves with the Graduate School Handbook.

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# 1. Department of Cognitive, Linguistic, and Psychological Sciences

The Department of Cognitive, Linguistic, and Psychological Sciences (CLPS) was created in 2010 by joining the departments of Psychology (established in 1892) and Cognitive & Linguistic Sciences (formed in 1986). State-of-the-art research in mind, brain, behavior and language requires spanning multiple levels of analysis and using a range of approaches and methodologies, and the integration of these two closely related departments has created an environment where this intellectual synthesis can flourish. The creation of CLPS reflects Brown's philosophy to build bridges between disciplines and to encourage interdisciplinary studies.

# 2. Research Areas and Faculty in CLPS

**Behavioral neuroscience/Comparative.** Neural bases and computational models of auditory and vestibular function, animal models of sensory loss, emotional development and dysfunction, memory, and higher cognitive functions; neural development, plasticity, and regeneration; canid communication and social cognition. *Faculty:* Buchsbaum, Colwill, Simmons.

**Cognitive neuroscience.** The neural basis of cognitive functions such as attention, perception, action, learning, memory, emotional regulation, executive/cognitive control, decision making, emotion, social cognition, and language. *Faculty:* Badre, FeldmanHall, Festa, Frank, Heindel, Serre, Shenhav, Song, Watanabe.

**Development.** Cognitive, social, and emotional development and language acquisition from behavioral, neurological, and computational perspectives. Specific topics include attention and memory, causal reasoning, social learning, behavior-situation interactions, infant speech perception, word recognition and word learning. Emphasis is on child development, but some faculty take a lifespan approach. *Faculty:* Buchsbaum, Feiman, Festa, Heindel, Morgan, Sobel.

**Higher-level cognition.** Human memory, learning, and cognitive control; inductive inference, causal reasoning, and decision-making; moral reasoning, social cognition and theory of mind and their development. *Faculty:* Badre, Buchsbaum, Feiman, FeldmanHall, Frank, Heindel, Krueger, Malle, Shenhav, Sloman, Sobel, Spoehr.

**Neural and computational models of cognition and language.** Neural and computational models of processes such as motor control, cognitive control, vision, categorization, learning, reasoning, and language. *Faculty:* Badre, Buchsbaum, Domini, Frank, Morgan, Serre, Sloman.

**Perception and action.** Computational, psychophysical, and ecological approaches to the problems of perceiving shape and motion, recognizing objects and scenes, processing auditory events, perceptual learning, and controlling action. *Faculty:* Domini, Serre, Song, Simmons, Warren, Watanabe, Welch.

**Phonetics and phonology.** Acoustic properties of phonetic categories of speech; physiological basis of articulation and perception; phonetic and phonological theories, phonetic/phonological interface. *Faculty:* Morgan. *Affiliated Faculty:* Cohen Priva

**Psycholinguistics and language processing.** The experimental study of language acquisition and language use across linguistic domains and the relationship between experimental and theoretical approaches to language. *Faculty:* Feiman, Morgan. *Affiliated Faculty:* AnderBois, Cohen Priva, Jacobson.

**Semantics and syntax.** Formal semantics, the syntax-semantics interface, lexical semantics, the interaction of information structure, discourse and pragmatics with semantics and syntax, categorial grammar and related theories of syntax. *Faculty:* Feiman. *Affiliated Faculty:* AnderBois, Jacobson.

**Social psychology.** Social cognition, theory of mind, moral judgment, perception of personality, person-situation interactions, self-image, social projection, intergroup perception, strategic behavior. *Faculty:* Boykin, FeldmanHall, Krueger, Malle.

# **3. Graduate Education in CLPS**

## 3.1 Goals and Commitments

Brown University's Department of Cognitive, Linguistic, and Psychological Sciences (CLPS) is dedicated to the multidisciplinary study of mind, brain, behavior, and language. It offers three Ph.D. programs: Cognitive Science, Linguistics, and Psychology. The programs share several features in common, which are described first. They also differ in some respects, and those differences are discussed next. Because of similarities between the Psychology and Cognitive Science programs, their specific requirements are discussed side by side. The requirements for the Linguistics program are discussed separately.

All three graduate programs are designed to educate and train scientists and scholars who will make contributions to society through research, teaching, and applied work. From the first year, students conduct research under faculty direction. Through research apprenticeship and coursework, students gain competence in the scientific questions, theories, and methods relevant to one or more areas of specialization. Programs of study are often individualized, and decisions about research and coursework are made in close collaboration with a research advisor and a graduate committee chosen by each student. Students may change research areas and advisors as their interests develop.

The CLPS Department has several distinct research areas (see p. 4), which serve to shape a student's specialized training and education. However, we encourage all students to acquire knowledge and techniques from more than one area and to compose advising committees with faculty members from different areas.

Likewise, the CLPS department has close relationships with numerous other departments at Brown (e.g., Neuroscience, Computer Science, Philosophy) that provide opportunities for students not only to take specialized graduate courses but also to invite faculty members in those departments to serve on their committees where appropriate in conformity with the rules of the relevant program.

#### 3.1.1 Statement on Diversity and Inclusion

The most up-to-date CLPS Departmental Climate statement may be found at the following link. <u>https://www.brown.edu/academics/cognitive-linguistic-psychological-sciences/diversity</u> The faculty, staff, and students of the Department of Cognitive, Linguistic, and Psychological Sciences (CLPS) strive to construct a community in which all members of the department are safe, supported, included, and respected. Recognizing that science is a collaborative and creative process relying on the free exchange of ideas, we affirm that this goal is important to us, not only because of the kind of community we want to create, but because a healthy community improves the quality of our science.

We as a community commit to:

- Creating and fostering a diverse department. This includes promoting diversity across dimensions of race, religion, gender, sexual orientation, nationality, ethnicity, disability, first generation status, and socioeconomic status.
- Taking personal responsibility for awareness of both individual and community needs, including awareness of differential power dynamics.
- Participating in opportunities to learn more about how to achieve and maintain an inclusive community.
- Building trust and cultivating open dialogue among community members.
- Prioritizing the mental, emotional, and physical health of all members of our community.

We recognize that there may be times when our community and individuals in it may fall short of the ideals to which we aspire. Beyond making active efforts to better achieve these ideals, we commit ourselves to following clear procedures in place to hold ourselves and each other accountable to these ideals and to ensure that such procedures are fair and transparent.

This is a living document. Together, we aim to attain progress, not perfection. We will continuously update this living document to reflect our changing values.

## 3.2 Financial Support

#### 3.2.1 Academic Year

Students accepted into any of the three Ph.D. programs are guaranteed five academic years of financial support contingent on satisfactory progress toward the Ph.D. degree. The support includes full-time tuition, health fee, and a stipend. Sources of support include university fellowships, teaching assistantships, grant-funded research assistantships, and dissertation fellowships. The Department does not guarantee financial support past the fifth year but has occasionally been able to provide it for one or two semesters for students in good academic standing. Students in good standing who previously have acquired at least one year of external funding (e.g., an NSF fellowship) receive priority in being awarded sixth-year support

#### 3.2.2 Summer

The Department normally provides four years of summer support in the program. This stipend includes health fees, and is provided to enable students to make progress toward the successful and timely completion of the degree including conducting research, preparing for preliminary exams, and working on the dissertation. If a student's research requires time off campus (e.g., field data collection, collaboration with other university, training in a summer institute), the

student and research advisor should write a brief summer work plan that describes (a) why the off-campus location is advantageous to the student's research, (b) what the scope of work is, and (c) in what time frame it can be completed. This statement is submitted to the DGS, who approves the work plan. Students should consult with the DGS, Graduate Advisor or their research advisor about projects for the summer months.

#### 3.2.3 External Funding

The ability to obtain independent funding is recognized not only as an important skill a student scholar needs to learn but as an indicator of achievement. It is strongly recommended that all students apply for externally-funded fellowships (e.g., NSF, Jacob Javitz, NIH). Non-US citizen students, who are not eligible for NSF and NIH funding, should seek alternate funding mechanisms (in consultation with their research advisor) or help their research advisor prepare a regular grant application for external funding. Accompanied by one of the department workshops, eligible students apply for an NSF graduate fellowship in the fall of their first year. All eligible students should also apply for an NRSA Fellowship at the end of their second year of study.

Explore the following sites for information about external funding:

- http://www.brown.edu/about/administration/international-affairs/other-funding-sources
- ► NSF Graduate Fellowship: <u>http://www.nsfgrfp.org</u>
- Notre Dame Institute of Advanced Studies (residential graduate fellowship)
  - o http://ndias.nd.edu/fellowships/graduate-student/
- National Defense Science and Engineering graduate fellowship
  - <u>http://ndseg.asee.org/application\_instructions</u>
- NVIDIA graduate fellowships
  - o <u>https://research.nvidia.com/relevant/graduate-fellowship-program</u>
- Ford Foundation (predoctoral, dissertation, post-doctoral)
  - o http://sites.nationalacademies.org/pga/fordfellowships/
- National Institute of Justice Graduate Research Fellowship Program Science, Technology, Engineering and Mathematics (e.g., life, brain, or computer sciences research "relevant to providing solutions to better prevent and control crime and help ensure the fair and impartial administration of criminal justice")
  - o <u>http://www.nij.gov/funding/pages/current.aspx</u>
  - see also <u>http://www.nij.gov/funding/fellowships/graduate-research-fellowship/pages/faqs.a</u> <u>spx</u>
- Cornell University has a very useful database of graduate fellowships:
  - o http://www.gradschool.cornell.edu/fellowships
- The APA has a searchable database
  - o <u>http://www.apa.org/about/awards/</u>

#### 3.2.4 Graduate School regulation regarding paid work

The Graduate School's policy regarding a graduate student's paid activities outside a stipend appointment (e.g., teaching assistantship) states that paid activities must represent training

opportunities that play an important role in preparing the graduate student for a career both inside and outside of academia. Students in good standing may engage in training-relevant activities up to twelve (12) hours per week during any academic term (spring, summer, or fall) in which they have a stipend appointment. Students must seek the approval of the Graduate School before engaging in any such activities. Note that regulations of outside agencies that provide student funding (e.g., NSF fellowships or faculty-held federal grants) and any regulations governing international students' visa status must be observed at all times.

#### 3.2.5 Travel Support

Financial support for graduate students' academic travel (e.g., to conferences) typically comes from grants and research funds held by the student's research advisor. When such funds are not available, students may apply to various sources for travel support:

Graduate School:

http://www.brown.edu/academics/gradschool/research-travel (and look for additional resources on this page). Note that many of the Graduate School funds require an application well in advance of the planned travel. See *Summary page*.

Graduate student council:

• <u>https://sites.brown.edu/gsc/resources/funding/conference-funding/</u>. Note that, here, too, you have to submit your application well in advance of the planned travel.

For international travel:

https://www.brown.edu/academics/gradschool/financing-support/phd-funding/internal-funding-appointments/international-travel-fund

Also look for possible fit with any of the following grant sources:

- https://watson.brown.edu/iapa/opportunities
- https://libguides.brown.edu/grants/students

In the event that funds from the research advisor and Graduate School are either not available or are substantially less than the actual travel costs, CLPS Ph.D. students may apply to the DGS for limited departmental travel support (up to a maximum of \$300 up to twice per academic year) if the travel considerably advances the student's academic progress. For example, presenting a first-authored poster or paper at a major conference or attending a high-level statistics workshop count as such advances; being *n*th author on a poster or attending a workshop that teaches techniques already covered by CLPS course offerings would not. Students who have completed their dissertation are eligible for departmental travel funds as long as (a) the student is presenting his or her dissertation research and (b) the conference presentation occurs in the year that the student completes his or her PhD. Note that departmental travel support is contingent on the availability of funds.

## 3.3 Program Advising

The Director of Graduate Study, Graduate Advisors, and Research Advisors are the primary sources of program contact and advising for graduate students. Research Advisors are the primary advisors and mentors for graduate students, and provide guidance on all aspects of a student's

training, in consultation with the student's committees. A student's Research Advisor and Graduate Advisor are responsible for monitoring student progress toward program goals. The Director of Graduate Study and Graduate Advisors are responsible for organizing departmental review, communicating program evaluation, approving department requirements, and assessing student standing. Each student will be assigned a Graduate Advisor at the start of their first year. Graduate Advisors work with Research Advisors to provide advice and guidance on progress through program milestones and toward student's training goals.

In order to keep program administration independent from research advising, a student's Graduate Advisor should not be involved in the student's research. Thus, the Graduate Advisor should not be the student's Research Advisor or serve on the student's committees. If the Graduate Advisor is involved in the student's research, the DGS will assign a new Graduate Advisor to that student.

## 3.4 Program Requirements

All requirements and deadlines in this Manual are approved by the faculty on an *approval date* (shown on the front page of the document), and they apply to students who are admitted on or after this approval date. When revisions to requirements and deadlines occur, they are adopted into the Manual on a new approval date, and students admitted prior to this new approval date have the option to follow either the revised Manual or the one in effect at the time of their admission.

# 4. General Components: All Ph.D. Programs

All three Ph.D. programs share the following components: six short workshops for first-year students (some are required for Linguistics), a first year project for Cognitive Science and Psychology and a first Qualifying Paper (due semester 4) for Linguistics, a preliminary exam (Cognitive Science and Psychology) or second Qualifying Paper (Linguistics), a four-course teaching requirement, a dissertation proposal, and dissertation with a public defense. Programs differ, however, in coursework and some other program-specific requirements.

## 4.1 Coursework: General Points

#### 4.1.1 Course Enrollments

First-year students typically enroll for four course credits per semester, which may include one or more credits in *Directed Graduate Research* (CLPS2096). You will need to request a registration override from your Research Advisor to enroll in this course.

Students' specific course choices depend on their Ph.D. program and are discussed in separate sections (5 and 9).

Before advancing to candidacy students must complete a "residency requirement" of 24 credits, which is often met by enrolling for four course credits in each of the first six semesters. Students supported by a teaching or research assistantship in a given semester normally enroll for only three actual course credits, but the Graduate School counts the assistantship as one additional credit; thus, the student still earns four credits toward the residency requirement.

#### 4.1.2 Grades

Courses intended to meet program requirements should be taken with the ABC/NC grade option, and a grade of B or better is needed to have the course count toward the requirement. Students

need to consult with their research adviser and Graduate Advisor if they are considering taking a course with the S/NC option. Even at S/NC, the course must be passed at a B performance level. Courses taken outside the department should also normally be taken with the ABC/NC grade option. If such a course is taken with the S/NC option, the student is responsible for providing a Course Performance Report to the Graduate Advisor responsible for their area.

#### 4.1.3 Course Levels

Courses at Brown numbered 1000 or higher can satisfy the Quantitative, Methodological, and Specialization requirements. Students should speak with their Graduate Advisor or DGS about the courses' suitability.

On occasion, undergraduate courses in other departments that are numbered below 1000 may satisfy certain program requirements. To this end, students need to consult with and receive approval from the appropriate Graduate Advisor, and they need to seek approval from the Graduate School to take an undergraduate course for graduate credit.

#### 4.1.4 Continuing Research

Students are expected to be actively engaged in research and scholarship as appropriate for their program throughout their enrollment. After their first-year project, many students choose to pursue research in related areas, but some make significant changes in their research direction at this time. These changes may require a change in research advisor or research lab during the second year. Students considering such a change should discuss their plans with the Graduate Advisor or DGS as early as possible.

## 4.2 Teaching Requirement

Every student must complete at least four semesters of supervised teaching assistance. Each student should get a variety of teaching experiences, including introductory lecture courses, statistics, and lab courses. In undergraduate lecture courses, responsibilities typically include grading, holding office hours, and (in some cases) leading discussion sections. In statistics and laboratory courses, responsibilities typically include conducting sections and supervising student projects. According to the Graduate School Handbook, a full appointment usually requires at least 18 hours per week, but should not exceed 20 hours per week averaged over the course of the term. From the third year on, graduate student teaching assistants should request giving at least one lecture in the course to which they are assigned.

Teaching assignments are made by the DGS and committee of Graduate Advisors, taking into account (a) departmental needs based on course enrollments, (b) assignment preferences expressed by the graduate student and faculty instructors, and (c) the general goal of giving each student experience with a variety of different types of courses.

All graduate students are strongly encouraged to participate in the Teaching Certificate Program of the Sheridan Center for Teaching and Learning: <u>http://www.brown.edu/Administration/Sheridan\_Center/</u>

In exceptional cases, a student may request a reduction of the required number of four teaching semesters. For example, some students have had previous graduate teaching experience, and if they can clearly document the institution, course, and their duties and activities in the course, a request for a reduction (one course at most) may be warranted. Students can submit these requests to their program's Graduate Advisor.

## 4.3 Department Service

Graduate students contribute in essential ways to departmental life through a variety of service roles. These include the elected graduate positions (see Section 13.5), as well as contribution to committees, colloquium and brown bag organizing, social media management, and other roles. In addition to offering an opportunity to shape departmental and graduate culture in CLPS, service roles are also a useful training experience for later professional life. Thus, all students are required to complete a minimum of one recognized service role during their time in the program. Note that students can and often do engage in more service than this minimum and doing so will be officially recognized by the program.

## 4.4 Transfer of Credits

Students who have completed graduate work in their fields of study at another institution may be able to transfer up to 8 "tuition units" (one semester course counts as one unit) toward a Ph.D. degree. Such transfers accelerate the time to completion of the Graduate School's 24 tuition unit requirement. Arriving at the 24 tuition unit requirement earlier than the typical three years does not prevent a student from enrolling in additional courses and do not change the student's guaranteed five-year financial support.

Students may apply for transfer of credit by completing an Application for Graduate Transfer Credit (in consultation with their program's Graduate Advisor, who then signs it before it is submitted to the Graduate School:

https://www.brown.edu/about/administration/registrar/sites/brown.edu.about.administration.regist rar/files/uploads/GradTransferCreditApp\_PhD2022.pdf

Some graduate work at another institution may also substitute for a small number of required courses in the student's CLPS Ph.D. program. Typically the department does not allow substitution for the two Core courses or for more than two specialization or methodological proficiency courses. Applications for such transfers require transcripts and course documentation (e.g., syllabus, reading list, homeworks), submitted to a Graduate Program Advisor or the DGS.

# 5. Requirements for the Ph.D. Programs in Cognitive Science and Psychology

Core courses and quantitative courses are typically completed in the first two years, and specialization courses may often last into the third year. All coursework as well as the preliminary exam, the teaching requirement, and the dissertation proposal must be completed to advance to candidacy.

All students are required to update their academic progress (including course work and completion of major requirements) on the *Tracking Sheet* appropriate for their Ph.D. program. These sheets are sent to every incoming student, and copies are appended to this document.

## 5.1 Coursework

#### 5.1.1 First-Year Course Load

Most first-year students take the first Core Course (from the sequence of 2 required Core courses) during their first semester and the Foundations statistics course during their second semester. Some students also take a specialization course and a research credit, though some take two research credits—CLPS 2091 *Graduate First Year Project Research* or CLPS 2096 *Directed* 

#### Graduate Research.

During the second and third year, students typically complete their Core course requirement as well as their statistics requirement, methodological, and specialization courses.

#### 5.1.2 Core Courses

Students in the Cognitive Science or Psychology programs are required to complete a sequence of two Core courses, CLPS 2001 and 2002.

#### 5.1.3 Quantitative Requirement

All students in Cognitive Science and Psychology must take the course *CLPS 2980 Foundations of Advanced Statistics* and two "modules" from a set of modules on advanced statistics courses offered by the department. Some courses outside the department may substitute for one or both of these modules. Students are encouraged to discuss these choices as early as possible with their research advisor and appropriate program Graduate Advisor.

#### 5.1.4 Methodological Proficiency

All students in **Cognitive Science** must demonstrate proficiency in two methods important to conducting research in their area of specialization. One of the methods must be a "formal" one, including, but not limited to, formal semantics, computational modeling, computer programming, computer graphics, mathematics, advanced statistical techniques, or analytic philosophy. The other method must be an "empirical" one, including, but not limited to, experimental methods, linguistic analysis, speech analysis and synthesis, movement analysis, field and survey methods, eye-tracking, and neurophysiological/neuroimaging techniques.

The student's research advisor and committee will determine the methodologies in which the student must demonstrate proficiency and the means by which such proficiency is to be demonstrated—for example, through the successful completion of appropriate coursework or competent use of a particular method in the student's own research.

The requirement in the **Psychology** PhD program is similar. Students must demonstrate proficiency in two methods, however both methods may be "empirical" in the case of Psychology.

#### 5.1.5 Specialization

All students in Cognitive Science and Psychology must complete at least **three additional courses** (1000 level or above) that will allow the student to obtain specialized knowledge in their primary area of expertise. Label and content of such an area of specialization are highly flexible, and so are the specific courses that constitute the area. These can be taken in any Brown department. Selection of specialization courses should be planned in consultation with a student's research advisor, committee, and as needed, their Graduate Advisor.

#### 5.1.6 Responsible Conduct of Research (RCR)

Students in Cognitive Science and Psychology programs are required to complete training in scientific and professional ethics prior to advancing to candidacy. This requirement can be met by completing any of the in-person or online instructional RCR programs offered at Brown: https://www.brown.edu/research/rcrprograms

The in-person courses are:

The Brown Ethics And Responsible Conduct Of Research course (BEARCORE) The Division of Biology and Medicine RCR Training Sequence The School of Public Health (SPH) RCR Training course

The online course is the CITI online course in RCR: <u>https://www.brown.edu/research/rcrprograms#CITI</u>

In some cases, a student's research will require additional ethics training beyond the Department's requirement. Those include the CITI online course in the ethical treatment of human subjects (<u>https://www.brown.edu/research/rcrprograms#CITI</u>) or specific, in-person, specialized training in the ethical treatment of animal subjects

(https://policy.brown.edu/policy/iacuc-training-and-education-policy-personnel-working-laborato ry-animals) required by Brown's Institutional Animal Care and Use Committee (IACUC). These programs are taken separately from and in addition to the required RCR training, as demanded by a student's research.

Students are encouraged to discuss with their Research Advisor and/or Graduate Advisor which RCR program to take. Among other considerations, some courses can also fulfill the RCR requirements of certain external fellowships. For example, NIH training grants will require completion of one of the in-person courses. NSF requirements can be met by either the in-person or online courses, though NSF strongly recommends in-person instruction. Students and Advisors should check requirements regularly to be sure of compliance with the most current agency requirements.

#### 5.1.7 Professional Development

Students in Cognitive Science and Psychology are required to complete a minimum of 6 professional development workshops or modules over the course of their time in the program. This is also recommended for students in Linguistics. This requirement can be fulfilled by taking any of the six or more workshops offered throughout the year in the CLPS department or any of the professional development modules offered through the graduate school, such as the IMSD modules

(https://www.brown.edu/initiatives/maximize-student-development/module-descriptions). Modules satisfying this requirement can be taken in any year in the program. Note that RCR training (see section 5.1.6) is its own requirement and must be taken in addition to the six Professional Development modules or workshops.

## 5.2 First-Year Project (FYP)

In their first semester students in Cognitive Science and Psychology initiate a first-year project whose content can range from experimental research to computational modeling to experimental linguistics. In the fall of their second year, students prepare a written report of their FYP and give an oral presentation of its major conclusions.

Students develop this project in collaboration with their first-year research advisor and in consultation with the first-year project committee. Students who do not already have a research advisor upon entering the program should consult with potential advisors during the first few weeks of the first year. The advising relationship should be established by the end of October. After consulting with the advisor, the student asks two or more other faculty members to serve on the first-year project committee, which the advisor chairs. At least one committee member

besides the chair must be a tenure-track CLPS faculty member; other members may be non-tenure-track faculty from CLPS, faculty from other departments, or occasionally faculty from outside Brown (with Graduate Advisor or DGS approval). The names of the committee members should be submitted to the appropriate Graduate Advisor by December 1 of the first semester. Students then develop a first-year project proposal and discuss this proposal in a meeting with their committee no later than January 31. The proposal can be a short written document (1-2 pages), an oral presentation, or both. Students are encouraged to consult the committee members when developing this proposal. After discussion during the meeting, possible revisions, and committee approval, the proposal serves as the framework for the actual project. Regular meetings with the research advisor are essential, and additional meetings with committee members are strongly recommended while executing the project. We recommend that the student update their committee (whether in a meeting or individually) about the progress of their FYP no later than the end of August.

The deadlines for this and related requirements in the first year are summarized in the following table:

December 1	Constitute First-Year-Project (FYP) Committee and submit names of committee members to Graduate Advisor (GA).
January 31	FYP proposal due (written or oral).
End of August	Update committee on FYP progress.
Mid-September or Early October	The oral presentations of FYP (and QP in Linguistics, see below), take place.
November 1	The final written FYP report is due. Submit one copy each to your advisor and committee members and the GA.
December 1	Committee's review and evaluation of FYP is due.
January 2	If applicable, FYP revision is due.
January 16	If applicable, committee's review and evaluation of FYP revision is due.

#### 5.2.1 Summary of Deadlines in the First Year

#### **5.2.2 Oral Presentations**

Each student's oral presentation (scheduled for mid-September to early October of the second year) is expected to provide a short review of the theoretical question or hypothesis, the methods (as appropriate), and the major results. (Linguistics QP presentations will differ from this general outline.) 20 minutes are allotted to the presentation, 10 minutes to questions and discussion.

#### 5.2.3 First-Year Project Report

During the fall semester, students will prepare their FYP report. It is expected that their research advisor provide feedback on their draft report before the final report is submitted to the full committee. Advisors may impose additional intermediate deadlines.

The final version of the FYP report is due on November 1, sent electronically to the FYP committee, with an e-copy to the appropriate Graduate Advisor. Although the form of the final FYP report can vary as required by the committee, most resemble a professional research report, such as would be written for publication in a peer reviewed journal. They are typically between 20 and 40 pages long. The report should provide a short, scholarly introduction that sets up its research question and hypotheses. It should then describe the approach and methods taken, the results obtained, and an interpretation of the results.

#### 5.2.4 First-Year Project Evaluation

After the student has turned in the first-year project report, the FYP committee evaluates it and decides whether revisions are needed before a final grade can be assigned. The committee must provide written feedback with any specific requests for revisions by December 1. The deadline for revisions is January 2. After evaluating the revised report by January 16, the committee then records the official grade: *Pass* or *Fail*, and communicates it to the student, the appropriate Graduate Advisor, and the DGS.

By mid-January, the department evaluates all parts of first-year students' work, including the FYP, and provides a written report to them on their progress and status in the program. Should the initial grade for the FYP report be a *Fail*, the student will be placed on Warning status for the Spring semester and has until the end of Spring semester to receive a *Pass* on a final revision; otherwise, the student will be withdrawn from the program

## 5.3 Preliminary Exam

Students in Psychology and Cognitive Science complete the "preliminary exam" (as the Graduate School calls it) by writing a scholarly paper on a topic agreed upon by the student and his or her prelim committee. Such a paper is not merely a summative review of a literature but makes a novel theoretical contribution to the reviewed literature. That contribution is typically the foundation for a series of empirical studies outlined in the dissertation proposal.

#### 5.3.1 The Prelim Committee

The prelim committee typically consists of three tenure-track faculty in CLPS and is chaired by the student's primary research advisor. Sometimes the committee includes one member who is either not a CLPS tenure-track faculty member or is a faculty member from a different department or institution. However, the committee must include at least two regular (tenure-track) faculty in CLPS, and any third member not from this group must be approved by the Graduate Advisor.

On the last day of the 4<sup>th</sup> semester (Spring), the student constitutes the prelim committee by submitting the committee member names to the appropriate Graduate Advisor.

Over the summer, the student discusses the paper's topic and scope with the committee. At least one face-to-face meeting is recommended.

#### 5.3.2 The Prelim Proposal

By the first day of the 5<sup>th</sup> semester (Fall), the student submits a written outline ("proposal") of the prelim paper to the committee, with an e-copy to the appropriate Graduate Advisor. Typically this document will be 4-8 pages long, but the expected length should be discussed with the prelim committee. The proposal informs the prelim committee of the topic and scope of the paper and

presents the overall argument for why this paper will be a valuable scientific contribution.

Students are expected to meet with their committee to receive feedback on the proposal and make revisions. After appropriate revisions and after the committee approves the proposal, the student works independently toward the actual paper's completion. The deadline for submitting the prelim paper to the committee is January 31.

#### 5.3.3 The Prelim Paper

The prelim paper is typically between 40 and 80 pages long, but the expected length should be discussed with the prelim committee. It is not an annotation or summative review of the relevant literature but a comprehensive argument or new theory in light of the literature, with the potential for empirical studies to test the argument or theory. Thus, the student is expected not only to have full command over the relevant literature but to make an independent scholarly contribution. Accordingly, between approval of the proposal and submission of the full paper, the student may discuss specific aspects of the topic or literature with the committee but must not receive feedback on written parts of the paper.

#### 5.3.4 Evaluation

The submitted prelim paper is akin to a journal manuscript submission—the best possible paper at the time of submission. After submission by January 31, the committee reads the paper and, by the last day of February, grades it, using the categories *Pass, Minor Revisions, Major Revisions,* or *Fail*. If the student is asked for revisions, these are due March 31, and after final touches following the committee's second review, the final prelim paper is due April 15. The committee then records the official grade: *Pass* or *Fail*, and reports it to the student, the appropriate Graduate Advisor, and the DGS. An e-copy of each prelim draft and the final prelim paper is to be sent to the Graduate Advisor and DGS

If the prelim paper is graded *Fail* by April 31, even after revisions, the student has failed a major program requirement and will be placed on Warning status for the Summer term. The graduate committee, in consultation with the student's prelim committee, will determine whether there are conditions and deadlines that would allow the student to return to Good standing. Otherwise the student will be withdrawn from the program at the end of the Summer term.

#### 5.3.5 Summary of Deadlines for Preliminary Exam

Last day of 4 <sup>th</sup> semester	Constitute preliminary exam committee and submit names of committee members to appropriate GA and DGS. Discussion of topic and scope with committee over the summer. At least one face-to-face meeting is recommended.
First day of 5 <sup>th</sup> semester	Submit written prelim proposal to committee. Meet with committee to receive feedback and make revisions.
During 5 <sup>th</sup> semester	Following committee approval of revised proposal, work on prelim paper through fall and into winter break.
Jan 31	Prelim paper due to committee.
Last day of Feb	Committee grade due: Pass, Minor Revisions, Major Revisions, Fail.

Mar 31	Revisions (if required) due to committee.
April 31	Committee's final grade due.

## 5.4 Dissertation

#### 5.4.1 The Dissertation Committee

During the 6<sup>th</sup> semester (Spring), students constitute their dissertation committee by submitting the committee member names to the appropriate Graduate Advisor.

The dissertation committee typically consists of three tenure-track faculty in CLPS and is chaired by the student's primary research advisor. Sometimes the committee includes one member who is either not a CLPS tenure-track faculty member or is a faculty member from a different department or institution. However, the committee must include at least two regular faculty in CLPS, and any third member not from this group must be approved by the Graduate Advisor. The committee of DGS and Graduate Advisors reserves the right not to approve the composition of a dissertation committee.

Most students' prelim committee members also serve as dissertation committee members, but occasionally the direction of the dissertation research calls for a member change. It is the student's responsibility to properly inform the prelim committee member who will not serve on the dissertation committee and to file the committee change with their Graduate Advisor.

#### 5.4.2 The Dissertation Proposal

No later than the last day of the 6<sup>th</sup> semester students submit an outline of their dissertation proposal to their dissertation committee. They then meet with the committee to receive feedback and write the actual dissertation proposal over the summer. The proposal is due to the committee on the first day of classes of the 7<sup>th</sup> semester.

The dissertation proposal describes in detail the content and scope of the planned dissertation research. It includes the rationale and significance of the proposed research, preliminary studies (if available), research design and methods for planned studies, and statistical analysis. There is no minimum length, but the proposal should be no longer than 20 pages (double spaced).

After submitting the written document to the dissertation committee, the committee reads it, and no later than 4 weeks after submission, the student defends the proposal before the committee. The committee may ask for one or more revisions until the proposal is deemed satisfactory for a high-quality doctoral thesis. An e-copy of each proposal draft and the final proposal is to be sent to the Graduate Advisor and DGS

Once the proposal is approved, the student conducts the planned studies over the fourth and fifth year in the program. Students should regularly inform their advisors and dissertation committee members of their progress during this time and discuss any necessary changes to the proposed research.

This overall schedule, shown below, provides students about 18 months to complete their dissertation work.

#### 5.4.3 Summary of Deadlines for Dissertation

During 6 <sup>th</sup> semester	Constitute dissertation committee
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Last day of spring classes	Written outline of dissertation proposal due to committee. Meet with committee to receive feedback and make revisions.
Summer after 6 <sup>th</sup> semester	Work on dissertation proposal
7 <sup>th</sup> semester: First day of classes	Submit dissertation proposal to committee.
Within 4 weeks of submission	Defense of dissertation proposal before committee
End of 8 <sup>th</sup> semester or beginning of 9 <sup>th</sup>	Dissertation Brownbag Talk
End of 9 <sup>th</sup> semester	Expected to complete dissertation research
Mid-10 <sup>th</sup> Semester	Finish writing the Dissertation Thesis Document and submit to the thesis committee <b>four weeks</b> prior to defense date and to the Graduate School <b>two weeks</b> prior to the defense date.
End of 10 <sup>th</sup> semester	Students are strongly encouraged to defend their dissertation by the end of their 10 <sup>th</sup> semester, at least 1 week prior to May 1. Defenses during the summer are possible but pose scheduling difficulties.

#### 5.4.4 Advancement to Candidacy

Students who have completed all graduate program requirements save the dissertation are admitted to Ph.D. Candidacy. This includes 24 credits, all coursework, teaching requirement, preliminary exam, and dissertation proposal.

#### 5.4.5 Dissertation Fellowship

Students in good standing who have an approved dissertation proposal are eligible for a dissertation fellowship. This funding mechanism, typically awarded during the fifth year, allows students to focus on dissertation work without distractions from other duties that come with traditional teaching or research assistantships.

#### 5.4.6 Dissertation Brownbag Talk

All students working on their dissertation are required to present in one of the department's brownbag talk series (currently Language/Linguistics, Cognition, Perception and Action, and Social Cognitive Science). This talk should take place roughly at the midway point of the dissertation work (end of 4<sup>th</sup> year or beginning of 5<sup>th</sup> year). The purpose is for students to share their evolving dissertation research and receive constructive feedback.

#### 5.4.7 Dissertation Thesis Document

Students are expected to complete data collection for their dissertation at the end of the 9<sup>th</sup> semester and concentrate on writing the doctoral thesis during the 10<sup>th</sup> semester. Initial drafts of the dissertation or of individual chapters should be submitted first to the student's advisor for

comment and to the other committee members once revisions suggested by the advisor have been incorporated.

Guidelines for preparing the dissertation and relevant university deadlines can be found on the Graduate School website:

<u>http://www.brown.edu/academics/gradschool/dissertation-guidelines</u>. Within these constraints, students should work with their research advisor and dissertation committee to prepare the dissertation in a style appropriate for the discipline and research area.

#### 5.4.8 Dissertation Defense

Dissertation defenses are scheduled at the beginning of the semester during which the defense is to take place. The proposed date has to be submitted to the Graduate Program Coordinator (Lori Rolfe), who ensures room availability and submits the paperwork to the Graduate School. The standard times are Wednesday or Friday at 3:00 p.m., and the standard location is the Friedman Auditorium in Metcalf. For spring graduation, the student must submit the dissertation by May 1, which means that the last acceptable defense date is a week earlier.

Should a summer defense be scheduled, no quorum is set for the number of faculty members attending, but it is expected that faculty members make an effort to attend summer defenses. At least two committee members must be present at the defense. The first day of fall semester is the last defense date that does not incur tuition costs. An extension of this deadline by up to one month requires a written request from the dissertation advisor to the Graduate School Academic Affairs Manager one month before the start of the new semester.

Students must provide a draft of their dissertation to their committee at least **four** weeks before the scheduled defense date, and the drafts are made available electronically to other department faculty members (likely via a website link). Students are urged to provide dissertation drafts to their committees well in advance of this deadline. The student's committee must read the draft within 2 weeks and then either sign off to allow the student to defend or else the defense is canceled (the Graduate School requires submission of the dissertation 2 weeks prior to defense).

The dissertation defense proceeds according to the following format:

- (a) The advisor presents the candidate using the text provided by the Graduate School.
- (b) The candidate presents a colloquium on the dissertation research (ca. 50 min).
- (c) The entire audience (including faculty) has an opportunity to ask questions moderated by the dissertation chair.
- (d) Faculty members remain for additional questions and discussion with the candidate moderated by the dissertation chair.
- (e) After the defense, attending faculty have the opportunity to sign the defense approval document determining whether or not the defense was successful. The Graduate Affairs Coordinator submits it to the Graduate School.

#### 5.4.9 Department Copy

The Department of Cognitive, Linguistic, and Psychological Sciences digitally archives copies of all Master's and Doctoral theses completed in the department. Upon receiving approval of the dissertation, students submit a pdf of the dissertation (with title and signature page but no authorization form) to the CLPS Student Affairs Coordinator.

# 6. Master's Degree in Cognitive Science and Psychology

The Department of Cognitive, Linguistic, and Psychological Sciences does not admit candidates solely for a Master's degree and does not require a Master's degree as a prerequisite for the doctorate. Some students elect to complete the Sc.M. en route to their Ph.D. In exceptional circumstances, students who were originally admitted to the Ph.D program may complete their studies with a terminal Master's degree. The department also offers Masters degrees to graduate students in other departments in the university (primarily as part of the Open Graduate Education program) and as a fifth year program to recently completed Brown University undergraduates. There is also a concurrent Baccalaureate/Master's program at Brown. In each case, the requirements for a Sc.M. in Psychology and Cognitive Science are as follows.

## 6.1 Requirements

- One year of full-time residency at Brown (8 tuition units);
- Satisfactory completion of five regular courses (not Directed Research or Teaching Practicum), which must include at least one graduate-level methodology or statistics course, the two core-course graduate sequence, and at least two substantive topic area courses. Students can sign up for a variable number of credits of CLPS2096 Directed Graduate Research (with their Research Advisor's registration override) to ensure that they obtain 8 units of course credit.
- A Master's thesis or First-Year Project (FYP) report approved to count as a Master's thesis approved by a committee of at least 3 faculty (chaired by an advisor from CLPS).
- A satisfactory oral defense of the thesis or FYP presentation.
- Completion of these requirements within 5 years of initial enrollment in the Ph.D. program.

## 6.2 Administrative Steps

#### 6.2.1 Application for Master's Degree

All graduate students will receive an email from the Registrar's Office in January, when the application to graduate opens. Students who would like to apply for a Master's degree en route to their Ph.D. must follow the instructions included in that email and apply by May 1. The registrar then prints an official application form that documents the student's coursework and residency credits. The DGS confirms on this form that the student has fulfilled all requirements for a Master's degree, and the Student Affairs Coordinator submits the form to the Graduate School.

#### 6.2.2 Submission of Master's Thesis

Also by May 1, the student must submit the Master's Thesis (or the FYP project in lieu of the Master's thesis) in accordance with the Graduate School guidelines, which include formatting and paper requirements as well as a signature page, title page, and authorization form: http://brown.edu/academics/gradschool/masters-thesis-GuidelinesIn the exceptional case when the research representing a Master's thesis has already been published, two printed copies of the article may be submitted to the Graduate School. The signature page, title page, and authorization form must still be submitted along with the printed copies.

If a student originally admitted to the Ph.D program decides to complete his or her studies with a terminal Master's degree but is not enrolled in the semester of degree application, the student's

status can be changed to a terminal Master of Science and the student can submit the thesis to the graduate school with a filing fee.

#### 6.2.3 Approval of the FYP Report as a Master's Thesis

The student's primary research advisor confirms with signature that the FYP report meets the scholarly requirements for a Master's thesis, which includes a satisfactory presentation of the FYP in front of the CLPS faculty. The signature form is available from a link on the thesis guidelines page.

#### 6.2.4 Registration

Students who apply for the Master's degree en route to their Ph.D. must be actively enrolled at the time the thesis is submitted (typically spring semester). However, if a student registers for fall semester and completes all of the requirements for the Master's degree during that semester, a fee for spring semester will not be charged, even though the degree itself is formally conferred at the end of spring semester.

#### 6.2.5 Department Copy of Master's Thesis

The Department of Cognitive, Linguistic, and Psychological Sciences digitally archives copies of all Master's and Doctoral theses completed in the department. Students submitting their thesis to the Graduate School should also submit a pdf to the CLPS Student Affairs Coordinator, complete with title and signature page (but no authorization form).

# 7. Requirements for the Ph.D. Program in Linguistics

Students in the Linguistics Ph.D. program will typically complete most of their course requirements during the first five semesters, with some of the electives and other specialization courses lasting into the rest of the third year. Students advance to candidacy when they have completed all coursework, the Qualifying papers, foreign language research requirement, teaching requirement, and dissertation proposal.

All students are required to update their academic course progress (including course work and completion of the major requirements) on the *Tracking Sheet* appropriate for the Linguistics Ph.D. program. These sheets are sent to every incoming student, and a web-based system is currently under development.

## 7.1 Course Requirements

Ph.D. students in Linguistics must complete the following course requirements:

A. Core Areas: One graduate level course in each of the following areas:

- Phonology
- ► Syntax
- Semantics

Courses at the 1000 level may satisfy this requirement provided that they are not the Introduction to Syntax or Introduction to Phonology, which are prerequisites to the more advanced courses.

Each of the three requirements above can be satisfied by a Topics course *where appropriate* (depending on the topic) or by other advanced courses beyond the introductory courses noted above. For example, Semantics can be satisfied by CLPS 1341 (Lexical Semantics) or CLPS 1342 (Formal Semantics) as well as by an appropriate Topics course. The suitability of any given advanced or Topics course will be determined by the faculty in the relevant area in conjunction with the Linguistics Graduate Advisor. When no suitable Topics or advanced course is available, the requirement will be satisfied by an Independent Study.

Students with no prior background in Phonology or Syntax will first take the Introduction to Phonology and/or Introduction to Syntax courses to fill the prerequisite for the more advanced courses. The determination of whether a student has the relevant prerequisite from their prior training will be made by the person teaching the advanced course in consultation with the student.

B. *Methodology Courses:* Two courses introducing students to two different methods. A methods course is one that will acquaint a student with techniques used in the analysis and/or collection of data above and beyond the techniques studied in the formal linguistics courses listed in A above. Appropriate courses include but are not limited to:

- Corpus Linguistics (CLPS1360)
- ► Field Methods (CLPS1390)
- Laboratory Methods for Psycholinguistics (CLPS1890) or other course on Experimental Methods that can be applied to psycholinguistic topics
- ► Brain Imaging (CLPS1490, CLPS1821)

Other methods courses are appropriate provided that they allow the student to apply the method to some aspect of the study of language as part of the course. The Linguistics Graduate Advisor in conjunction with the faculty teaching the course (and in consultation with other faculty if needed) will determine the suitability of other methods courses.

Statistics courses will not normally count as methods courses, but taking them is highly recommended. Many students' research may even require taking Statistics. Whether or not a student needs to take Statistics courses will be determined by the student in consultation with the faculty in their primary subarea and/or the Graduate Advisor.

C. *Psycholinguistics*. Two courses in Psycholinguistics broadly construed, including Language Acquisition, Neurolinguistics, and Language Processing. One of the two courses may simultaneously satisfy requirement (B) (the Methods requirements) provided that the course is suitable to both purposes.

D. *Core Course:* Students in the Linguistics program are required to take 1 semester of the department's two semester core sequence (typically either in their first or second year). Taking both semesters in the sequence is encouraged but not required.

E. *Electives*. A minimum of three more electives (four in the case that a single course was used for both requirement (B) and (C)). Students are particularly encouraged to take advantage of courses offered in CLPS and in other related departments that will enhance expertise in their primary area and to acquaint themselves with additional areas relevant to their primary area.

# 7.2 Qualifying Papers: Qualifying Paper 1 and Qualifying Paper II (Preliminary Exam)

Students will write two Qualifying Papers (QPs), each of which is a paper demonstrating ability to do original research. The first Qualifying Paper is due March 15 of Semester 4 but can (where appropriate) be submitted earlier, such as on the timetable of First Year Projects (FYP) for the other programs in CLPS. The second Qualifying Paper is due March 15 of Semester 6. For each QP, the Committees will determine whether the paper is a Pass and will convey the grade to the student by April 7 of Semester 4 (for first QP) or of Semester 6 (for second QP). Should a student submit the first QP on the FYP timetable, the determination of Pass will be conveyed to the student in accordance with the timetable for other FYPs. For any student entering the program in the spring semester or taking a one-semester clock-stopping leave of absence, the deadline dates will be adjusted accordingly. Such students will present their first QP in their fourth semester.

Each Qualifying Paper requires approval by a committee of three faculty members. The advisor and at least one other member of the committee will be from CLPS. Students will meet regularly with all members of their QP committee and keep all members informed of their progress, submitting drafts to the entire committee as appropriate.

Successful completion of the second QP constitutes successful completion of the Graduate School Preliminary Examination requirement.

The two Qualifying Papers must be sufficiently different in terms of the areas of linguistics and/or different methodologies. The Graduate Advisor, in conjunction with the other linguistics faculty, will determine whether there is sufficient difference between the two papers. In order to ensure the appropriate breadth, it is highly recommended that a different advisor be chosen for the two papers.

The QPs may develop naturally from term papers written in courses and seminars during the first two years, although they generally will go beyond the scope of a course term paper. In cases where it is appropriate, the first QP can be done earlier (e.g., in accordance with the FYP deadline for Cognitive Science and Psychology) and in such cases the papers might not develop from courses but from research launched earlier during the students graduate study.

The QPs should be of sufficient quality that they could be presented at any of the major general and/or regional conferences (Linguistic Society of America, Northeastern Linguistics Society, Chicago Linguistic Society, Berkeley Linguistic Society Conference, etc.) or more specialized conferences like Semantics and Linguistic Theory, CUNY Sentence Processing Conference, West Coast Conference on Formal Linguistics, BU Conference on Language Development, Association for Computational Linguistics Conference, Acoustical Society of America Conference, Cognitive Science conference, Cognitive Neuroscience Society Conference, etc. Students will be encouraged to submit abstracts of their QPs to these or other relevant conferences and present them there. We particularly encourage presentation at conferences that have published conference proceedings.

At least one QP (normally the first one) will be presented to the department during the departmental FYP/QP presentations in September, and this must be done in the student's 3rd or 5th semester. (A student entering in the spring can do this in their 4th semester.) This will be a 20-minute talk with 10 minutes for questions. If a student and the committee feel that the first QP

is sufficiently advanced by Semester 3—or if the student and advisor/committee agree that it is most advantageous to finish the first QP by the FYP deadline—then the student will present the first QP in Semester 3. If the student and advisor/committee feel that the QP is not sufficiently developed as to warrant presentation in Semester 3, then they will elect to present the first QP in Semester 5. (In rare cases they may instead chose to present the second QP in Semester 5.) Both QPs will also be presented at the LingLang Lunch (the details of the timing to be worked out by the advisor, student, and committee).

## 7.3. Language Research Requirement

Proficiency for research in one language other than English must be demonstrated. This can be gained through (a) a Field Methods class on a foreign language, (b) a combination of language sketches for phonology and syntax classes that study the same language, or (c) a term paper for an advanced theoretical or experimental class that requires the analysis of data in a language other than English. Students are also encouraged to obtain reading knowledge in at least one additional language in which academic research in linguistics or psychology of language is published.

## 7.4. Teaching Requirement

Every student must complete at least four semesters of supervised teaching practice. Teaching assignments are made by the DGS, taking into account (a) departmental needs based on course enrollments, (b) assignment preferences expressed by the graduate student and faculty instructors, and (c) the general goal of giving each student experience with a variety of different types of courses over her/his graduate career.

For more information about teaching techniques and workshops, consult the website of the Sheridan Center for Teaching and Learning:

http://www.brown.edu/Adminstration/Sheridan\_Center/

## 7.5. Dissertation Proposal and Dissertation Proposal Meeting

Upon completion of the second Qualifying Paper, a student should choose an advisor for the dissertation, a dissertation topic, and a dissertation committee consisting of at least 3 members. The advisor and at least one other member of the Dissertation Committee will be members of the CLPS Department. The dissertation committee should be formed by 1 month beyond the beginning of a student's 7th semester. The proposal of topic and committee will be sent to the Graduate Advisor in Linguistics who, in consultation with the relevant faulty, will approve the committee as appropriate for that topic.

Within a month after the formation of the Committee, the student will submit to the Committee a full dissertation proposal and will schedule a Proposal Meeting with the Committee to be held within two weeks of proposal submission. In the Proposal Meeting, student and committee discuss the suitability and likelihood of successful completion of the proposed dissertation. After discussion, the student leaves the meeting and the Committee determines whether the dissertation should proceed as planned or whether changes to the proposal are required.

## 7.6. Advancement to Candidacy

Students who have completed all graduate program requirements save the dissertation are admitted to Ph.D. Candidacy. These requirements include 24 credits, all coursework, teaching requirement, Qualifying Papers, foreign language research requirement, and dissertation proposal.

## 7.7. Dissertation

Dissertation students should regularly inform their advisor and full committee of their progress and timetable throughout their dissertation research and writing activities. Students are strongly advised to submit a full dissertation draft to their committee at least a month before the oral defense. A complete, penultimate version of the dissertation must be submitted to the committee at least two weeks before the final version of the dissertation is due to the Graduate School, usually on May 1, of the year of graduation. Oral defenses that take place in the summer (between Commencement and the beginning of classes of the next academic year) or at other times when classes are not in session must be scheduled and advertised to faculty at least two weeks in advance to insure that a quorum of at least five faculty (including members of the dissertation committee) are able to attend. In the event that a quorum of faculty is not able to attend, the oral defense must be rescheduled.

 Website of Graduate School Dissertation Guidelines: http://brown.edu/academics/gradschool/dissertation-guidelines

# 8. Master's Degree in Linguistics

The Department of Cognitive, Linguistic, and Psychological Sciences does not admit candidates solely for a Master's degree and does not require a Master's degree as a prerequisite for the doctorate. Some students elect to complete the Sc.M. or M.A. en route to their Ph.D. In exceptional circumstances, students who were originally admitted to the Ph.D program may complete their studies instead with a terminal Master's degree. The department also offers Masters degrees to graduate students in other departments in the university (primarily as part of the Open Graduate Education program) and as a fifth year program to recently completed Brown University undergraduates. In each case, the requirements for a Master's degree in Linguistics are as follows.

## 8.1 Requirements

- One year of full-time residency at Brown (8 tuition units);
- Satisfactory completion of eight courses at the graduate level, which must include:
- Phonetics and phonology: to be demonstrated by at least one course in phonetics and at least one course in phonology;
- Syntax and semantics: to be demonstrated by at least one course in syntax and at least one course in semantics;
- Acquisition, computational linguistics, neurolinguistics and/or psycholinguistics: to be demonstrated by at least two courses in these areas.
- Demonstration of reading knowledge in at least one foreign language.
- Completion of a Master's thesis, under the supervision of a faculty member from the Department. A proposal for the Master's thesis and the proposed supervisor must be approved in advance by the department. The Masters thesis is usually begun during the third semester and completed during the fourth semester.
- Completion of these requirements within five years of full-time enrollment since admission.

Submission of the thesis must follow the Graduate School guidelines, which include formatting and paper requirements as well as a signature page, title page, and authorization form. See

http://brown.edu/academics/gradschool/masters-thesis-Guidelines

In the exceptional case when the research representing a Master's thesis has already been published, two printed copies of the article may be submitted to the Graduate School. The signature page, title page, and authorization form must still be submitted along with the printed copies.

If a student originally admitted to the Ph.D program decides to complete his or her studies with a terminal Master's degree but is not enrolled in the semester of degree application, the student's status can be changed to a terminal Master of Science and the student can submit the thesis to the graduate school with a filing fee.

#### 8.1.1 Approval of the First Qualifying Paper as a Master's Thesis

The student's primary research advisor confirms with signature that the first qualifying paper meets the scholarly requirements for a Master's thesis, which includes a satisfactory presentation of the qualifying paper in front of the CLPS faculty. The signature form is available from a link on the thesis guidelines page.

#### 8.1.2 Registration

Students who apply for the Master's degree en route to their Ph.D. must be actively enrolled at the time the thesis is submitted (typically spring semester). However, if a student registers for fall semester and completes all of the requirements for the Master's degree during that semester, a fee for spring semester will not be charged, even though the degree itself is formally conferred at the end of spring semester.

#### 8.1.3 Department Copy of Master's Thesis

The Department of Cognitive, Linguistic, and Psychological Sciences archives copies of all Master's and Doctoral theses completed in the department. Students submitting their thesis to the Graduate School should also submit a copy to the CLPS Student Affairs Coordinator, printed on acid-free paper, complete with title and signature page (but no authorization form). The department covers the cost of binding.

## 9. Evaluations, Continuation in the Program, and Deferrals

The Department reviews the progress of each student on a yearly basis to determine whether the student is making satisfactory and timely progress in research, teaching, and program requirements. First-year students receive an additional interim review before the beginning of the second semester in the program, and second-year students in Cognitive Science and Psychology receive a brief evaluation once their FYP has been approved. All evaluations are in written form, sent as electronic letters. Students are encouraged to discuss the contents of their evaluations with their research advisors, Graduate Advisors, or DGS.

Besides providing a narrative of the student's strengths, weaknesses, and recommendations, evaluation letters indicate the student's standing in the program according to the Graduate School terminology of "Good," "Satisfactory," or "Warning." Note that "Satisfactory" standing, despite its innocuous connotation, indicates the student is not progressing in a timely manner or has

shown notable weaknesses in coursework, teaching, or research. If the weaknesses are not removed by the end of the semester in which the evaluation occurred, the student may be put on "Warning" status. In this case, the student receives explicit deadlines by which the problematic performance must be corrected—normally expiring by the end of the semester in which the "Warning" status was applied. If these problems are not corrected by the indicated time, the student will be terminated effective the end of the subsequent semester.

## 9.1 Leaves of Absence

The Graduate School has detailed policies that regulate various forms of leave of absence: <u>www.brown.edu/academics/gradschool/academics/rules-regulations/graduate-school-handbook</u> (starting pg. 38 in the 2020 Handbook). The department's procedures follow it closely. Please discuss any plans to take a leave with the DGS because the Graduate School will request a letter from the DGS to support the leave application and potentially specify conditions of return.

#### 9.1.1 Additional Procedures to Request a Professional Leave

Students may seek professional leave from the program to participate in an internship or other training opportunity off campus. This experience can be important for professional development and future employment, particularly for those seeking a non-academic career after graduation. However, the availability of such an opportunity must be balanced against the demands of the Ph.D. program, which requires full-time scholarship and research. Leaves for off-campus internships or training opportunities will generally be considered for students who have advanced to candidacy. The student should generate a brief proposal describing the opportunity and how it fits within their program progress. Their plan should make evident that participation (a) is essential either to their research or to their future career goals, (b) does not conflict with their research or program requirements, and (c) will not prolong time to degree (in terms of the funding year in program). The plan must provide a detailed timeline of any work to be completed prior to participation, with specific milestones noted in order to monitor for acceptable progress. The plan should be generated in consultation with and approval of the student's Research Advisor and must be approved by the Director of Graduate Study.

## 9.2 Vacation

The Brown Academic Calendar (see <u>www.brown.edu/Administration/Registrar/calendar.html</u>) lists a number of breaks in classes, such as the long winter break, spring break, and the break between summer session and fall semester. This schedule controls the meeting of courses that graduate students may attend or for which they may provide teaching assistance, but it does not otherwise control work schedules. Graduate students are expected to put in full-time effort on their training, research, and scholarship year round, with a reasonable amount of vacation time. Thus, graduate students continue to conduct research during the 5-week inter-semester break in December and January but may take a vacation of 1-2 weeks, preferably during the time the university is closed (12/22-1/4). Supported students are expected to do research over the summer. Any paid teaching that interferes with this effort will be counted against their stipend. Because of the faculty-student interactions involved in research, student vacation times should be arranged in advance with the student's research advisor.

## 9.3 Enrollment Deferral

When a newly admitted student submits a request for deferral of enrollment after accepting our offer of admission, it is the department's own decision to grant the request (the Graduate School is simply notified). The following considerations apply:

- 1. There is no direct financial burden to the department because the funding that would have been used for the deferring student one year will remain in our graduate funding account and can then be accessed the following year.
- 2. The student must have an excellent reason for requesting deferral.
- 3. Nonfinancial implications exist, especially for the particular area, research group, or both that the student was expected to join. For example, it may be undesirable to have the only student defer who accepted an offer in a particular area.

The decision process for granting a requested deferral involves discussions at two levels: (1) area faculty and the respective student; (2) appropriate Graduate Advisor, DGS, chair, and associate chair. A deferral will it be granted only if it is approved at both levels.

# **10.** Attendance at and Involvement in Department Events

In their role as CLPS department members, Ph.D. students are strongly expected to attend colloquia, job talks, brownbag talks in their area, and graduate admission events including Visiting Day. Graduate students also often help organize and schedule brownbag talk series in their area.

# 11. Grievances

The CLPS department is committed to fostering respectful relationships among all department members, and graduate students should find productive and collegial relationships with other students, their advisor, committee members, and other faculty. It is possible, however, that difficulties arise, and the University regulates potential grievance procedures in detail:

- Graduate School Handbook p. 48;
- http://www.brown.edu/academics/gradschool/grievance-procedures
- Section 10 of the official Faculty Rules and Regulations.

University policy determines that every student must have a fair and prompt hearing of grievances but that all other avenues of resolution should be exhausted before formal grievance procedures can begin. According to regulations, the student must attempt to resolve the issue directly with the person or persons involved. The next step is to take the issue either to the DGS or to the Department Chair. If these steps do not produce a satisfactory outcome, the student should initiate, with the assistance of the DGS and Department Chair, a formal grievance.

# 12. Ethical Standards

## 12.1. General Conduct

Each summer, all incoming graduate students are required to take an online tutorial on the rules of conduct defined in the Academic and Student Conduct Code: <a href="http://www.brown.edu/academics/gradschool/sites/brown.edu/academics.gradschool/files/uploads">http://www.brown.edu/academics/gradschool/sites/brown.edu/academics/gradschool/sites/brown.edu/academics.gradschool/files/uploads</a>

/Academic Code & Rules of Non-Conduct 2010-11.pdf

The Graduate School is in communication with new students about the online tutorial. Please consult this document if any questions about ethical standards arise. Also, please see the document on Misconduct in Research:

http://www.brown.edu/research/about-brown-research/policies/policy-responding-allegations-rese arch-misconduct

## 12.2. Human and Animal Subjects

All graduate students are required to comply with the University's policies and procedures on the ethical conduct of research including the protection of human and animal subjects. The specific policies and procedures can be found at:

Human Subjects Protection (IRB): http://www.brown.edu/research/institutional-review-board-irb

Animal Care Committee:

http://www.brown.edu/research/institutional-animal-care-and-use-committee-iacuc

## 12.3. Department Human Subject Pool

During the academic year the department supports a human subject pool based on undergraduate students volunteering to participate in research for course credit. The pool primarily serves research projects by senior honors students, first-year Ph.D. students, and studies in the pilot stage or not otherwise funded. This allows students more freedom to pursue innovative ideas rather than being limited to already-funded projects. The pool is administered through the SONA online system, which provides a means for researchers to post studies (including online studies), schedule appointments with participants, and award course credit.

Some department faculty keep a database of community participants, several faculty conduct online studies using Qualtrics, and developmental researchers have

## 13. Resources

## 13.1 Department Directory

Please find the up to date department directory here:

https://www.brown.edu/academics/cognitive-linguistic-psychological-sciences/people

## 13.2 Internal Site

https://sites.google.com/a/brown.edu/clps-internal

At this link you get access, as a department member, to:

- ▶ e-mailing aliases (e.g., all 2<sup>nd</sup>-year students, all faculty),
- room scheduling,
- technology support and news,
- poster printing,
- building security information,
- phone manuals
- visitor scheduling, and
- the department planning calendar.

## 13.3. Facilities

As part of Brown University's Plan for Academic Enrichment, CLPS has been formed from the former faculties of the Department of Cognitive & Linguistic Sciences and the Department of Psychology, as well as a number of subsequent hires. CLPS is housed in a recently renovated 36,000 square foot building with state-of-the art laboratories, classrooms, and meeting spaces.

- The Virtual Environment Navigation Lab (VENLab), one of the world's largest ambulatory virtual reality facilities
- A wide-area motion capture system for full-body kinematics
- A high-performance computing cluster
- A research-dedicated 3.0T MRI system
- A 64-channel Event Related Potential (ERP) system
- Multiple laboratories for animal behavior research (e.g., rats, zebra fish, canines)
- Several high-resolution eye-trackers
- Multiple laboratories for behavioral research with children and adults; individually, in dyads or in groups; with digital audio-video recording, processing, and production.
- A large suite of individual testing rooms for computer-presented experiments
- A computer classroom for teaching and learning

### 13.3.1. Library

The Metcalf Research space includes a library that houses a world class collection of Linguistics and Cognitive Science books and journals, available to all students and faculty. The Linguistics collection is comprised largely of donations by professors and consists of a well-rounded collection on theoretical linguistics (including phonology, syntax, and especially semantics) as well as a large collection on various aspects of psycholinguistics. Much of the core of the Linguistics collection was a gift of the late W. Nelson Francis, one of the founders of the linguistics program at Brown and a world-renowned expert on the history and dialects of English, dialectology in general, and—along with the late Henry Kucera—a pioneer in the area of corpus linguistics. Professor Francis generously donated the bulk of his private collection to the department, and it includes a major collection on historical linguistics, history and structure of English, and dialectology. The library's holdings include a number of original papers, mimeographed with fading purple ink, in theoretical linguistics, psycholinguistics, and historical linguistics that had a groundbreaking impact in the 1960s and 1970s and constitute an important record on the history of developments in linguistics. The library's collection in Cognitive Science has significant strengths in the areas of psycholinguistics, language acquisition, cognitive development, human learning and memory, artificial intelligence, and mathematical psychology, primarily through gifts from the collections of Peter D. Eimas and Richard B. Millward, both former faculty members in Psychology and Cognitive Science.

## 13.4. Office of Student Life

The Office of Student Life can help with a variety of needs and emergencies (including health and financial). It is located at 403 E Grad Ctr, 42 Charlesfield Street, phone 863-3800. An emergency number that is staffed 24 hours 7 days a week is 863-3322. It is a way to access emergency

referrals (including on- and off-campus Psychological Services). Medical leave requests start at the Office of Student Life.

## 13.5. CLPS Graduate Elected Positions

The election process for both CLPS Grad Reps and CLPS GSC Reps is as follows. Both elections are moderated by the current year's CLPS Grad Reps. A student cannot serve in both positions at the same time; therefore, students may be nominated for both positions, but ultimately must choose to run in only one election.

June 1 - June 8: Nominations open.

June 8 - June 15: Elections held.

June 15 - June 30: Transition of positions from current to incoming representatives.

#### **CLPS Graduate Student Representatives (2 elected positions)**

The CLPS Graduate Student Body elects two (2) Graduate Student Representatives to represent the CLPS Graduate Student Body's interests in the department as per the CLPS Bylaws. Second-year PhD students typically serve in this role, though the position is not restricted. These positions have a one (1) year term that runs from July 1 to June 30.

Each CLPS Grad Rep is a liaison between the CLPS graduate student body and the CLPS department. There are three primary duties:

- 1. Create opportunities for graduate students to voice their thoughts and concerns about grad student life in the department. This includes hosting grad student meetings each semester.
- 2. Communicate the thoughts and concerns of the graduate student body to the CLPS DGS, as well as to other relevant faculty and staff in the department. This includes having regular meetings with the CLPS DGS, having meetings with the grad program advisors as appropriate, and attending nonconfidential department faculty meetings.
- 3. Help plan grad student events as appropriate. This includes the graduate student recruitment weekend, as well as the graduate student retreat.

CLPS grad reps are advocates for the CLPS graduate student body. The grad reps serve as a voice for graduate students in the department, working to help foster an environment that is welcoming and inclusive of all grad students.

#### **CLPS GSC Representatives (2 elected positions)**

The CLPS Graduate Student Body elects two (2) GSC (Graduate Student Council) Representatives to represent the CLPS Graduate Student Body's interests in the GSC. These positions have a one (1) year term that runs from July 1 to June 30.

Each Graduate Student Council (GSC) Representative is a liaison between the GSC and the CLPS department. There are three primary duties:

- 1. Attend monthly GSC meetings. At these meetings the rep has voting power and is essentially a senator in the graduate student government.
- 2. Disseminate GSC related memos, etc., to the CLPS graduate student body.
- 3. Advocate for the CLPS graduate student body's best interests. This is often in the form of voting at GSC monthly meetings, but also making sure the department's voice is heard, perhaps by speaking at open floor time about an issue facing CLPS grads.

Aside from these duties, GSC reps can help appoint students to GSC committees, and should work closely with the Department Chair, DGS, and intradepartmental graduate reps to find common ground between administration and the graduate student body.

#### **CLPS DIAP Representative (1 elected position)**

The CLPS Graduate Student Body elects one DIAP (Diversity and Inclusion Action Plan) Representative to represent the CLPS Graduate Student Body's interests on the departmental DIAP committee and with DIAP related matters.

The DIAP Representative is a liaison between the Graduate Student Body, the Graduate Program Administration, and the DIAP committee. There are four primary duties:

- 1. Attend scheduled DIAP committee meetings and relevant subcommittee meetings.
- 2. Meet as needed with the DGS and/or Graduate Advisors to communicate and coordinate DIAP initiatives with graduate program leadership.
- 3. Disseminate DIAP initiatives and information to the Graduate Student Body
- 4. Advocate for the CLPS graduate student body's interests and concerns on the DIAP committee and with the graduate program leadership. This may involve collecting information from the graduate student body in order to best represent the interests of the graduate student community.

# 14. Tracking Forms: Available as Web Forms

You will be sent a link to a dedicated web form that tracks your progress in the program and to which only you, your research advisor, and the department administration have access. You are responsible for keeping your tracking form current and accurate. These forms are a primary means by which the Graduate Advisors and DGS track your program progress. Thus, it is a good practice to check and update these forms at least once each semester. You can also use the tracking form in conjunction with this Manual to maintain awareness of program milestones and upcoming deadlines.

# 15. Warning and Termination

The Graduate School has strict rules about warning and termination of students. In general, putting a student on Warning status means that within a defined time frame (typically one semester), the student must meet specific requirements for reinstatement into good standing (e.g., meeting a failed program requirement; demonstrating research progress; finding an advisor). If the student does not meet the specified stipulations within the time frame, the student will be withdrawn from the program.

If Warning is by Jan 31, then final evaluation is by May 31. If the student does not return to satisfactory standing, termination will occur at the end of spring semester. If Warning is by May 31, then final evaluation is by Aug 21. If the student does not return to satisfactory standing, termination will occur at the end of summer semester. If Warning is by Aug 21, then final evaluation is by Jan 31 (or earlier). If the student does not return to satisfactory standing, termination will occur before winter semester.

It is possible for the Warning status to be extended by one period.

To change a student's status to Warning, the program provides the student with a written notice of warning status that:

i. outlines areas of poor performance,

ii. lists specific performance goals and deadlines,

iii. states the date of the evaluation, and

iv. indicates that the student will be terminated at the end of the specified time period if performance goals are not met.

The program provides this letter to the student, and a copy to the Graduate School, by the specified deadline.

#### Notice of withdrawal

A written notice of withdrawal must be delivered to the student by the deadline, with a copy to the Graduate School. The program also submits a withdrawal form to the Graduate School by the deadline.

Students who are withdrawn before the end of the semester for reasons relating to academic performance will continue to be supported (at minimum Graduate School levels) until the end of the semester in which they are withdrawn. With the express approval of the Dean, warning can lead to an immediate removal of funding in the case of a severe infraction of the academic code or failure to satisfactorily complete the duties of the student's appointment.

Depending on the severity of the problem, a student may be placed immediately on *warning* or *termination* status. In cases of extreme non-performance, a student can be terminated at the end of the current semester, but only with a special petition to the Dean of the Graduate School.