PhD Student Guide

Doctoral Program in: Psychology

School of Behavioral and Brain Sciences The University of Texas at Dallas

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INTRODUCTION

The BBS PhD Student Guide is a working document that provides information on policies and procedures in the PhD Programs in the School of Behavioral and Brain Sciences (BBS). It does not replace, but rather supplements, information you can find from official University sources, including the Office of Graduate Education and the Graduate Catalog.

The BBS faculty and its representatives on the Graduate Studies Committee may make changes which could affect students during their time at UTD. Likewise, legislative actions, financial realities, or changes in University policy may affect academic requirements. Our curricula and requirements are under continuing faculty review. When changes occur, we will do our best to notify you in a timely manner, so be sure to check your UTD e-mail regularly. If you have questions not answered in this Guide or you are unsure about policies and procedures, please contact Dr. Stillman, Associate Dean for Graduate Studies, or your Department Head (Dr. Thompson for Neuroscience, Dr. Le Prell for Speech, Language, and Hearing, or Dr. Holub and Dr. Kennedy for Psychology.)

Like all universities here and abroad, financial pressures resulting from declining government support will impact faculty and students alike. Fortunately, UT Dallas is a healthy and growing institution and has not experienced the severe cutbacks other universities have faced. Nonetheless, we will be expected to make our programs more efficient and effective. Time to degree is an important measure of program efficiency and there will be pressure on students and their mentors to decrease the time between program milestones. There will also be regular and rigorous evaluation of student performance. We must be certain that the students in whom we invest our time and financial resources are the ones having the greatest likelihood of success in the program and their careers.

PhD PROGRAM ADMINISTRATION

Department Faculty: Each PhD program is located in one of the 3 BBS Departments. The 2 tracks of the Cognition and Neuroscience PhD are each located in a different Department. The Departmental faculty in Neuroscience, Psychology, and Speech, Language, and Hearing are responsible for the PhD programs in their Departments. They develop the PhD program's curriculum and requirements, advising and mentoring, and evaluation of student performance and progress.

Your research advisor is the primary faculty member with whom you will work; he or she will provide research mentoring, help you select courses, and carry out other responsibilities described in the "Advising" section.

Department Heads: Dr. Kennedy for the Cognitive Neuroscience track of the Cognition and Neuroscience program, Dr. Thompson for the Neuroscience track of the Cognition and Neuroscience program, Dr. Le Prell for Speech, Language, and Hearing Sciences, and Dr. Holub for Psychology. Consult your Department Head on any issue relating to doctoral study, including information on program requirements, procedures and opportunities, assistantship assignments, and other student academic issues. Associate Dean for Graduate Studies: The Associate Dean for Graduate Studies (Dr. Stillman) coordinates all BBS graduate programs. The Associate Dean also serves on the UTD Graduate Council and is the School's liaison with the UTD Dean of Graduate Education (Dr. González).

Dean: The Dean (Dr. Small) oversees all of the School's academic and research activities.

Center Directors: Each of the School's six Centers has a director who oversees PhD student participation in its research and other activities. They are: Dr. Shoup at the Callier Center for Communication Disorders; Dr. Chapman at the Center for BrainHealth; Dr. Rugg at the Center for Vital Longevity; Dr. Owen at the Center for Children and Families; Dr. Price at the Center for Advanced Pain Studies; and Dr. Kilgard at the Texas Biomedical Device Center.

Academic Support Coordinators: Each PhD program has an academic support coordinator (ASC) who assists PhD students with course registration, completing administrative forms, and other needs as described in this Guide. For Cognition and Neuroscience, the ASC is Cymone Samuels. For Psychology, the ASC is Betsy Winter. For Speech, Language, and Hearing Sciences, the ASC is Ciara Owens.

PhD PROGRAM FACILITIES

Some offices, classrooms and research facilities of the School of Behavioral and Brain Sciences are located on the Richardson campus; others are located in the School's six centers. The Callier Center for Communication Disorders-Dallas, the Center for BrainHealth, and the Center for Vital Longevity are located near the campus of the UT Southwestern Medical Center at Dallas. The Center for Children and Families, the Center for Advanced Pain Studies, and the Texas Biomedical Device Center are located on the main campus. The Callier Center has a primary focus on speech, language, and hearing and includes research laboratories, clinical services, and educational programs for children and adults with a wide variety of communication needs. The Center for Children and Families offers clinical and community outreach activities organized around three initiatives: parenting healthy families, strengthening interpersonal relationships, and enhancing thinking and learning. The Center for BrainHealth emphasizes research activities in the areas of developmental disorders, clinical neuroscience, and aging. Research at the Center for Vital Longevity focuses on cognitive aging, age-related diseases affecting cognition, and factors which support successful aging. The Center for Advanced Pain Studies is pursuing lines of research aimed at alleviating suffering from pain and improving the lives of people with chronic pain and/or migraine. The Texas Biomedical Device Center aims to develop technologies to prevent injuries, detect impairments, and restore quality of life lost due to neurological injuries and disease. The Centers' collaborative arrangements with the UT Southwestern Medical School expand PhD student research opportunities including access to clinical populations and brain imaging and other research facilities.

STUDENT OFFICES AND STUDY AREAS

Full-time doctoral students are eligible for shared office space or a carrel in a study area; space is available in several locations on the Richardson campus and the off-campus Centers. Students whose primary location is in an off-campus Center should contact their Department Head or appropriate Center administrator to request an office/carrel assignment. Because of the shortage of space, we cannot assure that all students will have office space. Students who do not need or use the space will be asked to relinquish it. Students whose office is located in one of the Centers, but who have TA responsibilities on the Richardson campus, may sign up for shared space when holding office hours. One of the Academic Support Coordinators will send out an email before each semester to allow students to sign up for TA times in the shared office. There are currently 2 shared offices available in CRA for TA's to use when meeting with students. The School does not provide computers or other equipment for the student offices and shared spaces.

ELEARNING

To access eLearning, students use their NetID and NetID password. Course materials for courses in which students are enrolled, and any course for which a student may be the Teaching Assistant, may be found on eLearning.

COMPLIANCE TRAINING

Students who are appointed as Teaching Assistants or Research Assistants must complete Compliance Training. This training provides information regarding laws and policies applicable to the University of Texas at Dallas and how, as an employee, to ensure compliances with these laws and policies. Students appointed as a Teaching Assistant or Research Assistant for the first time must complete this training within 30 days of the appointment, and continuing TAs and RAs are required to take the training each year as a refresher. The training is completed online, found in eLearning.

PhD ADVISING

Research Advisor

You will primarily work with your research advisor, who will provide you with mentoring in research, guidance in the selection of courses, assistance in preparing and updating your degree planning and Milestones Agreement forms, and career guidance. The research advisor supervises and must sign off on the student's qualifying proposals and papers and other documents submitted to the Department. In most cases, the research advisor will become the chair of the student's dissertation committee. All tenured system faculty are eligible to serve as research advisors including faculty in departments other than the one to which the student was admitted.

Occasionally, a student may wish to change research advisors. There are many reasons a student may seek a change. However, a change of research advisors should be carefully considered since starting in a new lab or new area can result in delays in meeting deadlines. You should seek the advice of your Department Head or the Associate Dean before initiating a change. There are also situations in which a research advisor may no longer wish to serve as a student's advisor. It is a faculty prerogative to withdraw as a student's research advisor.

Whether by student choice or faculty decision, a student who at any time lacks a research advisor for a semester will be dismissed from the program.

REGISTERING FOR COURSES

Before registration each semester students must meet with their research advisor to complete a registration form. After the research advisor has signed the form, the student submits it to their Academic Support Coordinator (Cognition and Neuroscience, Cymone Samuels; Psychology, Betsy Winter; Speech, Language, and Hearing Sciences, Ciara Owens). The Academic Support Coordinator will register students online; students are not permitted to register themselves.

If you wish to add or drop a course, you must repeat the process starting with your research advisor. If there is a "Hold" on your student account (which could result from missing documents, unpaid fees, financial aid issues, or even an incorrect mailing address) you must resolve the problem before you can be registered. You should review your registration and payments regularly so that any errors can be caught and correctly quickly; you can do this by going to the Galaxy online portal on the UT Dallas webpage and accessing your Orion system account.

DEGREE PLANNING AND ANNUAL REPORTING

Doctoral study in BBS includes a series of milestones. The key milestones include: 1) completion of core and advanced coursework, 2) development of proposals and completion of qualifying projects and papers, 3) preparation and defense of the dissertation proposal, and 4) completion and defense of the dissertation. Students will approach these tasks somewhat differently, but each step is critical toward completion of the degree. Timely achievement of each milestone is essential, and students who fall behind risk losing assistantship support or even being dismissed from the PhD program.

Degree plans for each PhD program, found on the program webpages, show when and how students expect to meet coursework and other requirements. These forms also help the programs project the need for courses not offered annually. The student and research advisor initiate the degree plan; as a working document the degree plan is updated annually to reflect the student's developing research focus and career goals. The School offers many seminars on special topics, so it may not be possible to anticipate every aspect of a student's entire degree plan from the start. But a degree plan should be in place to specify how the student will meet coursework requirements and to indicate the timelines for meeting degree milestones. A final degree plan demonstrating completion of all program requirements must be filed along with the application for graduation.

In addition to the degree plan, the UT System requires that a Milestones Agreement Form be on file before the end of the student's first semester in the PhD program. The milestones agreement form officially informs students and their advisors of their progress in completing specific degree requirements. The student and research advisor must review, update and sign this form annually and submit it to the Department Head.

Every spring, students will be notified by their Department Head that they must complete an annual report detailing their progress and accomplishments toward completion of the PhD, including coursework completed, teaching and research activities, professional papers and presentations, and achievement of program milestones. This information, along with independently gathered data on the student's academic, research, and assistantship performance, is incorporated into an annual evaluation that is used to advise the student and to make decisions about retention in the program and providing assistantship funding, as described below.

CRITERIA FOR RETENTION AND ASSISTANTSHIP FUNDING (Policy currently under review and subject to change)

The Department Faculty for each PhD program meet annually to review the progress of PhD students. The quality of the student's performance, the rate of progress, and the likelihood of completing the degree are the primary criteria used by faculty in these evaluations and students are notified by letter concerning whether their progress. In some cases, students may be given specific feedback including deadlines for completing specific requirements that they must meet in order to remain in the program. Students are encouraged to meet with their advisors periodically to discuss their progress and obtain informal feedback. Students whose progress is unsatisfactory risk suspension or loss of their assistantship and may be dropped from the program. Listed below are some of the standards considered in determining whether a student is making satisfactory progress.

A. Excellence in coursework:

PhD students are expected to excel in their coursework and to exceed the University's minimum grade-point average. Grades that are consistently at the minimum level may indicate unsatisfactory performance. The University requires that graduate students maintain a minimum

overall grade-point average of 3.0; an overall GPA below 3.0 automatically results in academic probation and suspension of assistantship support. In addition, PhD students in BBS must maintain a cumulative GPA of at least 3.0 in their core courses and receive grades of Pass (P) in all independent study courses. Students should be aware that if the syllabus for a graduate course indicates that plus/minus grading will be used, a grade of B- will result in fewer than 3.0 grade points for that class. Students should also be aware that a grade of incomplete (I) will automatically revert to an F if not resolved within eight weeks after the start of the next semester. Although an incomplete may occasionally be unavoidable, repeated incompletes suggest unsatisfactory performance and may result in the student being dropped from the program.

With their advisor's approval, graduate students can retake up to three courses, one time each. Students can use the Repeated Course Grade Adjustment form to request that only their last grade in a repeated course be used in calculating their GPA, although all repeated courses will remain on the transcript.

B. Timely completion of all program milestones:

PhD students are expected to meet all deadlines and milestones concerning qualifying papers and projects and the dissertation.

C. Growth in research and professional skills:

Students are expected to demonstrate continuing progress in acquiring the specialized knowledge, research skills, and written and oral communication skills necessary to independently conduct high quality research and to communicate effectively to professional peers and students. All students are expected to be actively involved in faculty-supervised research and independent study throughout their program.

D. Fulfillment of all requirements of teaching and/or research assistantships:

Assistantship funding represents a privilege and a responsibility; students who fail to fulfill requirements of their assistantships risk losing their funding.

E. Active participation in the intellectual life of the School:

Students are expected to attend area "brown-bag" seminars and public dissertation meetings, the School-wide Colloquium series, and lectures by visiting scholars including faculty candidates. All of these activities contribute to the BBS community and its culture of collaboration, enriching the intellectual experiences of students and faculty alike.

Students who find they are unable to meet deadlines or achieve expected standards because of personal or professional conflicts are encouraged to meet with their research advisor and Department Head as soon as they become aware of the problem. Options include requesting a leave of absence or declining assistantship support (with assurance that the support will be renewed in the future). A request for a leave of absence or deferral of an assistantship position requires the approval of the Graduate Studies Committee and cannot be assumed.

LEAVE OF ABSENCE

Students in good standing may request a leave of absence for personal or financial reasons or to complete a professional requirement such as a Clinical Fellowship Year (CFY) or Optional Professional Training (OPT). A brief memo to the Graduate Studies Committee indicating the reason for requesting leave and the expected date of return should be submitted to the Academic Support Coordinator. Leaves are normally granted to students in good standing for up to one year. Extensions beyond a year may also be granted, but require an annual request and reapplication to the University at the point when the student returns. If the Graduate Studies Committee turns down the request for an extension, reinstatement

requires a new application to the doctoral program that will undergo competitive review with new applicants. Granting of leave does not extend the 10-year limit for completing all requirements for the degree.

SCHOLASTIC DISHONESTY

Scholastic dishonesty in any form is taken very seriously and the University has a formal judicial procedure for resolving allegations of scholastic dishonesty. Students are strongly advised to avoid any situation in which scholastic dishonesty might be suspected. Plagiarism is a form of scholastic dishonesty and each year several allegations of plagiarism occur. All students should carefully familiarize themselves with the University policy on plagiarism. This is especially important for international students who may be less familiar with the plagiarism standards at universities in this country. If you have questions, ask your research advisor, Department Head, or Academic Support Coordinator.. Many faculty will require that papers be submitted through Turnitin.com, an online program which identifies similarities in prose with previously published materials. All dissertations must be submitted through Turnitin.com. Further information regarding scholastic dishonesty can be found here: http://www.utdallas.edu/conduct/dishonesty/.

PhD CURRICULUM

Advanced Electives

PhD degrees in BBS require a minimum of 75 graduate credit hours. The curriculum for each PhD program consists of a General Core, a Major Field/Area Core, Advanced courses, Independent Study/Research, and the Dissertation.

The General Core, required of all PhD students, has two components. One is the Doctoral Proseminar (HCS 6302), a 3-credit course that introduces students to the faculty and research domains in the School and addresses the many issues related to successful doctoral study and career development. The Doctoral Proseminar is supplemented by a School-wide colloquium series featuring internationally known scientists, as well as by area-specific brown-bag seminars, which include presentations by students, faculty, and researchers visiting from other universities. Students are expected to attend their area "brown bags" and all of the BBS colloquia; all of these are announced on the BBS webpage and through e-mails to students.

The other component of the General Core comprises 6-9 credits of Research Methods and Statistics courses that provide a foundation in the research design and statistical analyses that are important for research in Behavioral and Brain Sciences. Most students will be required by their research advisor or dissertation committee to take additional advanced coursework in research design, statistics, or other research tools relevant to their research.

A brief list of the coursework required for each PhD program is shown below; see also the UT Dallas Graduate Catalog. The University's course look-up page, CourseBook, provides more detail on some of the specific courses listed below.

Cognition and Neuroscience PhD: Cognitive Neuroscience track

Doctoral Proseminar HCS 6302 Issues in Behavioral and Brain Sciences Research Methods & Statistics HCS 6312 Research Methods in BBS – Part I

HCS 6313 Research Methods in BBS - Part II

HCS 6330 Cognitive Science OR HCS 6395 Cognitive Psychology Major Field/Area Core

> HCS 6346 Systems Neuroscience OR 6338 Functional Neuroanatomy Minimum of 9 HCS credit hours selected by student with approval of

research advisor. An area core course can count as a core

course or as an advanced elective, but not both. Depending on a student's background and research interests, additional advanced electives may be necessary.

Cognition and Neuroscience PhD: Systems Neuroscience track

Doctoral Proseminar HCS 6302 Issues in Behavioral and Brain Sciences Research Methods & Statistics HCS 6312 Research Methods in BBS – Part I

HCS 6341 Genes Brain and Behavior

Major Field/Area Core HCS 7121 Graduate Seminar: every semester after the first

> HCS 6340 Cellular Neuroscience HCS 6346 Systems Neuroscience HCS 7343 Neuropharmacology

One course in the area of Cognitive Neuroscience, in Year 2 or later.

Approved courses are: HCS 6330 Cognitive Science HCS 6331 Cognitive Development

HCS 6333 Memory

HCS 6343 Neurobiology of Learning and Memory

HCS 6395 Cognitive Psychology

HCS 7309 Neural Correlates of Human Cognition

HCS 7338 Brain Connectivity

Minimum of 3 additional HCS credit hours selected by student with Advanced Electives

approval of research advisor. An area core course can

count as a core course or as an advanced elective, but not both.

Depending on a student's background and research interests, additional

advanced electives may be necessary.

Speech, Language, and Hearing Sciences PhD

Doctoral Proseminar HCS 6302 Issues in Behavioral and Brain Sciences Research Methods & Statistics HCS 6312 Research Methods in BBS – Part I

HCS 6313 Research Methods in BBS – Part II

Seminar in Speech Science Major Field/Area Core

Seminar in Language Science (2 of 3)Seminar in Hearing Science

15 credits of doctoral level electives. These will be selected by students Advanced Electives

in collaboration with their mentors. These courses may be taken outside

of SLH and outside of BBS (e.g., engineering) as appropriate.

Psychology PhD

Doctoral Proseminar HCS 6302 Issues in Behavioral and Brain Sciences Research Methods & Statistics HCS 6312 Research Methods in BBS – Part I

HCS 6313 Research Methods in BBS – Part II HCS 6317 Research Methods in Psychology

Four courses representing at least two of the areas below and including Major Field/Area Cores

two courses in the student's concentration area:

1. Developmental Psychology concentration area

HCS 6331 Cognitive Development HCS 6350 Social Development HCS 6368 Language Development

2. Cognitive Psychology concentration area

HCS 6330 Cognitive Science

HCS 6333 Memory HCS 6395 Cognitive Psychology

3. Social/Personality Psychology concentration area

HCS 6327 Personality

HCS 6376 Social Psychology

4. Neuroscience concentration area

HCS 6346 Systems Neuroscience

HCS 6338 Functional Neuroanatomy

9 credits of doctoral courses approved by advisor; can include courses not selected for area core and must include an additional 3-credit advanced research methods course.

Waiver of Coursework Requirements

Students who enter the PhD program having successfully completed graduate coursework relevant to degree requirements may seek approval from the Graduate Studies Committee to waive specific courses. Students should submit such a request to their Department Head and attach the syllabus from the equivalent course taken previously. Generally, only courses in which a grade of A was earned will be considered, and the Department Head may require that another course be substituted for the waived course.

Transfer of Credit

Advanced Electives

Transfer of credit from another university is necessary only for PhD students who enter the program with extensive in-field, graduate coursework. Currently, students can request that up to 36 credits of graduate coursework completed elsewhere, with grades of B or better, be transferred toward PhD degree requirements. Those courses do not require a formal credit transfer request. To request a transfer of credit to substitute for a program requirement, the student must complete the Transfer of Credit Request and provide the Academic Support Coordinator with catalog course descriptions documenting the equivalence between courses taken elsewhere and UT Dallas courses. The Department, the UT Dallas Dean of Graduate Education, and the Registrar must approve all requests and approval should not be assumed. Transfer of credit from international universities can be problematic because of different systems of awarding credit and grades. Acceptance of transferred credit hours will not occur until after the student has completed 9 semester credit hours at UT Dallas with a grade point average of at least 3.0, and all petitions must be processed and approved no later than the semester prior to the one in which the student applies for graduation.

Master's Degree en Route

Because of overlapping requirements, PhD students in Cognition and Neuroscience and Psychology may simultaneously seek a Master of Science (M.S.) degree in Applied Cognition and Neuroscience or Psychology. Students interested in the dual degree program must complete a master's degree plan approved by Dr. Golden, the Program Head in Applied Cognition and Neuroscience or Dr. Nelson in Psychology, showing how they will meet the coursework and research requirements for the M.S. degree. Students must submit a Graduate Change of Program Request in order to matriculate into the master's program no later than the semester prior to the semester in which the degree will be conferred. Students cannot be considered for a master's degree en route until they have been matriculated into that degree program and have a degree plan for that program on file. Please contact Melanie Davis (ACN) or Betsy Winter (PSYC) for specific information and procedures.

Clinical Certification (Speech, Language, and Hearing Sciences program)

The master's degree in Speech-Language Pathology and Doctor of Audiology (AuD) programs provide clinical preparation for certification and licensure in the professions of speech-language pathology and audiology. The PhD in Speech, Language, and Hearing Sciences prepares students for research and academic careers; it is not an advanced clinical degree. There are options for students to complete relevant clinical coursework and some students may choose to complete all required coursework and experiences necessary for clinical licensure. Students interested in completing requirements for clinical certification and licensure in speech-language pathology should contact Dr. Stillman for details. Students interested in completing requirements for clinical licensure and certification in audiology should contact Dr. Cokely.

QUALIFYING PAPERS AND PROJECTS

Students in all BBS PhD programs must complete a set of qualifying papers and projects before they can advance to PhD candidacy by successfully defending their dissertation proposal. These qualifying papers and projects take the place of a PhD qualifying examination. Through their qualifying papers and projects students demonstrate mastery of the literature in their field, competence in research processes and methods, and written and oral communication skills commensurate with professional standards in the discipline. Because professional writing skills are considered in evaluating all qualifying papers, students who cannot effectively communicate their findings may fail to have their papers accepted, regardless of the strength of their finding. It is essential that students with poor written communication skills seek outside tutoring or instruction. Research advisors may offer suggestions to enhance the content and organization of papers but they cannot be expected to devote time to improving poorly constructed prose.

Several qualifying plans are described below. Students admitted to Psychology prior to or during Fall 2020 usually follow Qualifying Plan 1. Students admitted to Cognition and Neuroscience - Cognitive Neuroscience prior to or during Fall 2020 track may, with their research advisor's approval, select either Qualifying Plan 1 or Qualifying Plan 2. Students admitted to Psychology or Cognition and Neuroscience - Cognitive Neuroscience during or after Fall 2020 will follow the Pre-Dissertation Portfolio. Students in Speech, Language, and Hearing admitted prior to or during Fall 2020 may proceed with Qualifying Plan 1 or 2, or they may elect to follow the new Speech, Language, and Hearing Sciences Track. Students in Speech, Language, and Hearing admitted after Fall 2020 will follow the Speech, Language, and Hearing Sciences Track. Finally, students in Cognition and Neuroscience - Systems Neuroscience track follow the Qualifying Plan for Systems Neuroscience. Each plan is discussed in turn.

Qualifying Plan for Psychology or Cognition and Neuroscience – Cognitive Neuroscience admitted prior to or during Fall 2020

Qualifying Plan 1: Qualifying Thesis

Plan 1 consists of a Qualifying Thesis, which is a research project supported by an extensive literature review, that takes the form of a published journal article. The Qualifying Thesis resembles but is less comprehensive than the dissertation; it is guided and evaluated by a faculty committee chaired by the student's research advisor that includes at least two other faculty members with expertise relevant to the project. The committee provides feedback in the design, conduct, and write-up of the study and is responsible for evaluating the final product, which must be completed during the fall semester of the student's third year in the PhD program. See Overview of Qualifying Plan 1 for a summary of key events and deadlines for completing Plan 1. The Psychological Sciences Guidelines for Completing Theses and <u>Dissertations</u> describes an alternative timetable for completing program requirements in four rather than five years, but students generally use the five-year time table.

For Plan 1, the student works with the research advisor during the first semester in the program to identify a research question and to develop a pre-proposal (i.e., prospectus) for the Qualifying Thesis that provides an overview of the research area and specific research questions. When a suitable pre-proposal has been prepared the student and research advisor identify two other potential committee members with expertise appropriate to the project. The student provides them with a copy of the pre-proposal and invites them to serve on the Qualifying Thesis committee. Potential committee members should be given ample time (two weeks) to review the pre-proposal and to provide the student with feedback including any needed revisions. The student obtains faculty signatures on the Qualifying Thesis Committee Membership Form and submits this form and the final version of the pre-proposal to the Academic Support Coordinator by February 1 of the first year of the program. The student's research advisor serves as Chair of the Qualifying Thesis committee and one of the other members is identified as a Vice-Chair who will assume the Chair's responsibilities should the Chair be unavailable to complete supervision of the thesis.

Under guidance of the thesis committee the student next writes a full Qualifying Thesis proposal in journal format, including completed Introduction and Method sections and an overview of the planned statistical analyses; the proposal also may include hypothesized results and their significance. By August 1 of the first year of the program, the student must provide a copy of the completed proposal to the thesis committee; they will determine whether revisions are necessary before scheduling a Qualifying Thesis proposal defense meeting. At the end of the proposal defense meeting the committee may require revisions to the proposal, or alternatively they may approve the project and sign the Qualifying Thesis Proposal Approval Form. The proposal must be defended and approved by October 1 of the second year of the program. Because the proposal approved by the Qualifying Committee is an agreement regarding the design of the study and the breadth of research literature to be surveyed in the thesis, the Qualifying Thesis Proposal Approval form must be submitted before data collection for the project can begin.

During the second year of the PhD program the student conducts the approved Qualifying Thesis project. By February 1 of the second year of the program the student must submit a progress report on the status of data collection and analysis, any changes to the project after it was underway, and the expected timeline for project completion to the Qualifying Thesis Committee and the Academic Support Coordinator.

The full draft of the Qualifying Thesis must be submitted to the Qualifying Thesis Committee for review by August 1 of the second year of the program. The committee will determine if revisions are needed before the formal Qualifying Thesis defense meeting can be scheduled. The thesis defense meeting must be held by October 1 of the third year in the program, at least two weeks after the final, complete draft of thesis is submitted to the committee for review.

At the formal qualifying thesis defense meeting the student presents the thesis and answers questions about the research and the research area. At the end of the defense the committee rates the Qualifying Thesis as "Acceptable," "Acceptable with Revisions," or "Not Acceptable." A rating of "Acceptable" means that the student has clearly met the criteria established for successful completion of the thesis, although in most cases minor editorial changes are necessary before the committee approves the final thesis manuscript. For a thesis rated "Acceptable with Revisions" the Qualifying Thesis Committee will specify more substantive changes, and the student must incorporate these in a revised manuscript that is submitted with a detailed cover letter that indicates where revisions have been made and fully explains why any recommended changes have not been made. The Qualifying Thesis Committee must approve all final revisions of theses rated "Acceptable" or "Acceptable with Revision" by signing the Qualifying Thesis Final Approval during the fall semester of the third year, unless a Request for Extension has been submitted and an alternative deadline has been approved by the Graduate Studies Committee.

A qualifying thesis rated "Not Acceptable" by thesis committee member(s) will be reviewed by one or more independent faculty members appointed by the Associate Dean for Graduate Studies in consultation with the Area Head. If the thesis is rated as "Not Acceptable" by the independent rater(s) the student is subject to dismissal from the program. However, if the independent rating(s) deem the qualifying thesis Acceptable or Acceptable with Revisions the student will have one semester in which to identify and be accepted by a new research advisor.

It should be noted that a competently conducted Qualifying Thesis will not be rated "Not Acceptable" due to unanticipated results; approval of the Qualifying Thesis proposal indicates the committee's satisfaction with the design of the study.

The final step in completing Plan 1 is for the student to present the Qualifying Thesis research at a public meeting such as a brown-bag session during the fall semester of the third year. With committee approval, the brown bag can be completed on the same day as the qualifying thesis defense. The brown bag requirement is intended to give students experience in public presentation prior to the dissertation proposal defense. It is also a way to disseminate information to faculty and students regarding doctoral student research within the school. Performance in the presentation will not affect acceptance of the project. However, students will receive feedback that will help to develop presentation skills. The student should contact the brown bag coordinator in his or her area to schedule the presentation; after the presentation the student submits a signed Public Presentation of Research Project form to the Academic Support Coordinator.

Qualifying Plan 2: Research Project, plus Integrative Literature Review or Grant Application

Qualifying Plan 2 has two components. One component consists of a research project supervised by the research advisor. The second component requires the student to demonstrate substantive knowledge of the research literature in one of two ways: by writing an integrative literature review OR by writing a substantive grant application. The Graduate Studies Committee must approve the proposal for each component of Plan 2 before the student can initiate that component. The two components of Plan 2 are described below, followed by a description of the evaluation process that applies to all Plan 2 projects. See Overview of Qualifying Plan 2 for a summary of key events and deadlines for completing the two components of Plan 2.

Plan 2, Part 1/Year 1: Research Project

The Qualifying Plan 2 research project is an empirical study, designed and conducted by the student, that usually has its roots in work being conducted in the research advisor's lab. The study's scope should be sufficiently narrow to enable it to be completed within 7 months, but sufficiently comprehensive to

demonstrate the student's research skill in his or her field of study. The completed study is written up in journal format for evaluative review and ideally will be submitted and accepted for publication, although this is not required.

The Qualifying Plan 2 research project requires the student to work with the research advisor during the first semester in the program to identify a research question and to develop a 2-5 page Research Project Proposal describing the rationale and methodology for the project. After the research advisor approves the proposal, the student must submit it to the Academic Support Coordinator no later than February 15 of the first year for review and approval by the Graduate Studies Committee. The Graduate Studies Committee must approve the research project before anything more than preliminary data can be collected.

By October 1 of the second year in the program, the final paper resulting from the research project must be approved by the research advisor ("first reader") and submitted to the Academic Support Coordinator for evaluation by the Graduate Studies Committee as described below. The final version of the research project manuscript must be approved by the Graduate Studies Committee during the fall term of the second year, unless a Request for Extension has been submitted and the Graduate Studies Committee has approved an alternative deadline.

The final step in completing the research project component of Plan 2 is for the student to present the research at a public meeting, such as a "brown-bag" session, during the same semester in which the project was approved. The brown bag requirement is intended to give students experience in public presentation prior to the dissertation proposal defense. It is also a way to disseminate information to faculty and students regarding doctoral student research within the school. Performance in the presentation will not affect acceptance of the project, but students will receive feedback that will help to develop presentation skills. The student should contact the "brown bag" coordinator in his or her area to schedule the presentation. After the presentation the student submits a signed Public Presentation of Research Project to the Academic Support Coordinator.

Students who have completed a master's thesis prior to enrolling in the PhD program may request a waiver of the research project requirement, but it should not be assumed that a previous master's thesis will be accepted in lieu of the research project or any other doctoral requirement. To be considered for a waiver, submit a copy of the thesis to the Graduate Studies Committee, which will evaluate it using the same criteria applied to research projects and will consider whether the thesis adequately demonstrates research competence commensurate with that required for a dissertation in the student's area of interest. Some master's theses will not meet this important criterion. In addition, some research advisors require students to complete a research project in the area in which they plan to conduct their dissertation research.

Plan 2, Part 2/Year 2, Option 1: Integrative Literature Review

The <u>integrative literature review</u> is an original critical analysis of an important research topic, written in accordance with the publication guidelines of a prominent journal in a relevant field and demonstrating rigor, scope, and originality commensurate with publication. The review should be based on independent thinking, and should be sufficiently original that it advances knowledge in the field; it should not simply organize and summarize existing knowledge but should provide a novel perspective that constitutes a genuine contribution to the field.

The integrative literature review requires the student to work with the research advisor to develop a proposal defining the topic and scope of the integrative review during the fall semester of the second year in the program. After the research advisor approves the proposal, the student must submit it to the Academic Support Coordinator no later than February 1 of the second year in the program for review and approval by the Graduate Studies Committee. The proposal (2–5 pages long) should convey the goals of the paper, the domain of literature to be reviewed, and relevant citations; it must also indicate the particular journal model the student is following (e.g., Psychological Review, Psychological Bulletin, Journal of Speech, Language, and Hearing Research, Journal of Child Language, etc.).

The student must submit the completed integrative literature review, with approval from the research advisor, to the Academic Support Coordinator by October 1 of the third year in the program, for evaluation by the Graduate Studies Committee as described below. The integrative literature review must be rated "Acceptable" by the Graduate Studies Committee by the end of the fall semester of the third year in the program unless a Request for Extension has been submitted and an alternative deadline has been approved by the Graduate Studies Committee.

Plan 2, Part 2/Year 2, Option 2: Grant Application

The grant application component provides students with experience in analyzing and synthesizing the research literature and in developing the rationale, literature review, and design of a potentially fundable study. The grant application requires the student to work with the research advisor during the fall semester of the second year in the program to develop a pre-proposal defining the scope and research goals of the grant application and the organization from which funding will be sought, typically a major Federal agency such as the National Institutes of Health (NIH) or the National Science Foundation (NSF). A proposal to submit an application to a different agency or organization will require clear justification and a copy of the agency's proposal instructions to ensure that the funding mechanism is sufficient broad in scope to meet the requirements of the qualifying project.

The student must submit the grant pre-proposal, approved by the research advisor, to the Academic Support Coordinator by February 1 of the second year in the program, and the Graduate Studies Committee must approve the grant pre-proposal before the student begins to write the full grant proposal. For grant applications to agencies that that require a very brief literature review, the Graduate Studies Committee may require the student to submit a more comprehensive supplemental literature review and references in order to demonstrate mastery of the relevant research literature. It is expected that students will submit their grant proposals to the relevant agency for consideration for funding.

The student must submit the completed grant application, with approval from the research advisor, to the Academic Support Coordinator by October 1 of the third year in the program, for evaluation by the Graduate Studies Committee as described below. The grant application must be rated "Acceptable" by the Graduate Studies Committee by the end of the fall semester of the third year in the program unless a Request for Extension has been submitted and an alternative deadline has been approved by the Graduate Studies Committee.

Evaluating Plan 2 Components: Research Projects, Integrative Literature Reviews, Grant Applications

Plan 2 components are all evaluated using a consistent process, which begins with an evaluation by the student's research advisor as the "first reader." After the first reader approves the manuscript the Graduate Studies Committee designates another faculty member as a "second reader" who will evaluate it independently. If there is substantial disagreement between the first and second readers the Graduate Studies Committee will appoint a third reader to evaluate the paper.

To maintain the integrity of the review process, second and third readers are anonymous. Students may not attempt to contact a reader unless the reader has agreed to be identified on the Graduate Studies Committee's memo to the student, in which case the student is free to consult with the reader concerning the review and any suggested revisions.

The Graduate Studies Committee uses the readers' evaluations to assign the paper one of the three ratings:

"Acceptable" means that the student has clearly met the criteria established for successful completion of the research project, although minor editorial changes may be required. After making these changes the student must submit the revised manuscript for final review and approval by the Graduate Studies Committee.

For projects rated "Acceptable with Revisions" the Graduate Studies Committee will provide the student with written recommendations for revising the paper; the student must submit a revised manuscript with a detailed cover letter that indicates where the revisions have been made and/or full explanation of why recommended changes were not made. The revised paper is then reviewed and rated again by the second reader and the Graduate Studies Committee. The process repeats as needed until the Graduate Studies Committee rates the project as "Acceptable."

For projects rated "Not Acceptable" the Graduate Studies Committee will provide the student with written recommendations concerning a course of action for a different submission. If the student receives a rating of "Not Acceptable" on the second submission he or she will be subject to dismissal from the program, regardless of whether the re-submission is on the same or different topic or whether the research advisor is the same or a different member of the faculty.

Each Plan 2 component must be rated "Acceptable" by the Graduate Studies Committee by the end of the semester in which it is due, and students must adhere to all deadlines unless a Request for Extension has been submitted and an alternative deadline has been approved by the Graduate Studies Committee. Students should note that the Graduate Studies Committee makes every effort to rate papers within a month, but ratings may be delayed significantly if papers are submitted at times when faculty are unavailable, such as near holiday breaks or during the summer term. The submission deadlines are designed to avoid such delays,

Pre-Dissertation Portfolio for Psychology or Cognition and Neuroscience – Cognitive Neuroscience admitted during or after Fall 2020

Students and their mentors will work on the milestone 1 and 2 over the course of the first two years and will determine the order and timing for work on each milestone. The final deadline for completion of both milestones is May 1st of the 2nd year. This deadline will be enforced, and extensions will only be given in unusual circumstances. See Overview of Pre-Dissertation Portfolio for a summary of key events and deadlines. Students will check in with the Graduate Progress Committee* (GPC) at various touchpoints (a-c) outlined below.

*The GPC is a program-level committee in which members rotate off every 2-3 years. Program heads chair the GPC for their program. The committee checks in at several points in the year to make sure students are making progress, reviews the projects that have been proposed to make sure that they are all around the same level of scope, and meets with students who are struggling in May/June after milestone projects are due to help them develop a growth plan for moving forward.

Milestone 1: Research Project: This research project is an empirical study, designed and conducted by the student, that usually has its roots in work being conducted in the research advisor's lab. The study's scope should be sufficiently narrow to enable it to be completed within roughly 1 year, but sufficiently comprehensive to demonstrate the student's research skill in their field of study. The completed study is written up in journal format for evaluative review and ideally will be submitted and accepted for publication, although this is not required.

Milestone 1a: Research Project Proposal (2-5 page document outlining rationale and methodology for the project). Approved by research advisor and submitted to the (GPC) by February 15th of the 1st year. The GPC will ensure that the project can be completed as described in the time allotted and will seek additional reviewers if needed.

Milestone 1b: Research project submitted in manuscript form to the GPC by May 1st of the 2nd year. Two reviewers, suggested by the student and approved by the GPC, complete a rubric and provide feedback. Students respond to reviews in letter form (similar to response to reviewers for journal submission) and revise the manuscript when appropriate. This will only be rereviewed when requested by the GPC.

Milestone 1c: Presentation. The student will present research at a public brown-bag (Psychology Lecture Series). Someone from the GPC will rubric-score this presentation to include in portfolio and for assessment purposes.

Milestone 2: Grant Proposal or Literature Review. The student, under guidance of the research advisor, will prepare either a grant application or a literature review. Grant applications should be targeted for NRSA, NSF, or similar grant agencies. Literature reviews should be the scope and length of reviews in Trends in Cognitive Science, Child Development Perspectives, or other area-specific journals (i.e., usually less than 5000 words). Due by May 1st of 2nd year. Two reviewers, suggested by the student and approved by the GPC, complete a rubric and provide feedback. Students respond to reviews in letter form (similar to response to reviewers for journal submission) and revise the manuscript when appropriate. This will only be rereviewed when requested by the GPC.

Pre-Dissertation Portfolio Review: During the annual student assessment meeting in May, the faculty will review the portfolios of all 2nd year students to ensure continuation in the program. This will include the two milestones outlined above, coursework, and work as a TA/RA. Concerns will be mitigated by the GPC, which might include some form of remediation or discontinuation from program with a master's degree.

Dissertation: The dissertation milestones are modified slightly with some updates to deadlines and additional oversight by the Graduate Progress Committee.

Milestone 3a: Dissertation Committee and Prospectus. The student should write a 2-3 page prospectus to invite faculty to join the committee. Students should hold meetings with their committee as needed and are encouraged to do so early on in project development. Due by Fall of the 3rd year.

Milestone 3b: Dissertation Proposal. The dissertation proposal is a comprehensive document outlining the proposed dissertation project. It includes a rationale, statement of the problem, specific hypotheses, discussion of relevant literature, methodology and procedures, a plan for statistical analysis, and when appropriate, pilot results. The student can propose a traditional dissertation project or, if they have a large corpus of independent research, can propose a "three first-authored paper" dissertation. The committee approves the proposal document before scheduling the proposal defense. Due by spring of the 3rd year.

Milestone 3c: Public Dissertation Proposal Defense. The student should defend the dissertation proposal by May 15th of the 3rd year.

Milestone 3d: Scheduling Final Oral Exam (Dissertation Defense). After completing the project, students should submit their final dissertation to committee for feedback and approval. Student should successfully defend their dissertation in spring of their 5th year.

Qualifying Plan for Systems Neuroscience

All PhD students in the Systems Neuroscience track are required to present their research in the area brown bag meeting every year, and students must publish at least one peer-reviewed research paper as the first author before scheduling the defense of the dissertation. See Overview of Qualifying Plan - Systems Neuroscience for a summary of key events and deadlines for students in this track.

In the first three years, students complete a Research Project and a Grant Proposal. The First Year Research Project is evaluated by the student's First Year Project Committee, which consists of the student's advisor and two other members of the BBS faculty. The Grant Proposal serves as the dissertation proposal, and it is evaluated by the Dissertation Committee, which usually consists of the members of the First Year Project Committee and one additional member.

Systems Neuroscience Research Project (First Year Project):

The first year project serves as a qualifying exam and consists of a write-up and presentation of a single experiment, carried out by the student, which usually has its roots in work already being conducted in the research advisor's lab. It is a study sufficiently narrow in scope to be completed within 7 months, but sufficiently comprehensive to demonstrate research skill in the student's field of study. Students should effectively communicate an understanding of the background literature and the rationale for the experiment, clearly explain details of methods, results, and analysis, and draw reasonable conclusions. The written document should be formatted like a primary research article and the student will present and defend the paper in a 25-minute public talk.

Before initiating the first year research project, a 2-5 page research project proposal describing the rationale and methodology of the research project and including key references is developed in consultation with the student's research advisor. The student and research advisor will work together to identify at least two other faculty committee members who have appropriate expertise for the proposed research project. The student will provide a copy of the proposal to the prospective committee members and invite them to serve on the committee. Students must submit the proposal and the First Year Project Committee Membership – Systems Neuroscience Program form to the Academic Support Coordinator by February 1 of the first year of study.

Over the next seven months, the student will complete the First Year Project. The completed study should be written up in journal format for evaluative review. The student will submit the project to the committee and Academic Support Coordinator by September 1 of the second year of study. The committee will determine if revisions are needed before a defense meeting is scheduled. First Year Projects are evaluated as "acceptable", "acceptable with revisions", or "not acceptable". "Acceptable" means that the student has clearly met the criteria established for successful completion of the First Year Project. However, in most cases, minor editorial changes are necessary before final approval is given. In cases of "acceptable with revisions", the Committee will specify recommended changes in the paper, and require the student to submit a revision incorporating these changes. Along with the revised manuscript, the student must submit a detailed cover letter indicating where specified revisions have been made and the pages where the revisions may be found and/or a full explanation of why the student decided not to make changes recommended by the Committee. All revisions of papers rated "acceptable" or "acceptable with revision" must be approved by December 1 of the second year of study. A majority rating of "not acceptable" on a First Year Project will be reviewed by an independent faculty member appointed by the Associate Dean for Graduate Studies in consultation with the Area Head. Independent evaluation supporting the rating of unacceptable subjects the student to dismissal from the program. It should be noted that a competently conducted First Year Project will not be rated "not acceptable" due to disappointing data. The student will submit the signed First Year Project Approval Form – Systems Neuroscience Program along with a hard

copy of the First Year Project to the Academic Support Coordinator no later than December 1 of the second year.

The oral defense of the First Year Project must be held by the end of the fall semester. The student will publicly present the research project and answer questions about the research and the research area. With committee approval, the student can make their public presentation and hold the defense of their First Year Project during the graduate seminar (brown bag) meeting. The coordinator of the graduate seminar series should be contacted in the summer to arrange for scheduling the public presentation. Students should conclude their oral presentation with a brief description of the specific aims of their dissertation research. The student will submit the First Year Project Public Presentation and Defense – Systems

Neuroscience to the Academic Support Coordinator before the end of the fall semester. Students who do not pass their oral defense may be allowed a second chance to defend before February 1. A majority vote of "Fail" following the second oral defense of the qualifying project will result in dismissal of the student from the program.

Systems Neuroscience Grant Proposal:

The Grant Proposal will serve as the dissertation proposal. Students should begin by writing a Pre-Proposal (in the format of a typical Specific Aims Page, 1 page maximum) and then adding a member and formalizing the dissertation committee. By February 1 of the second year of study, the Pre-Proposal should be submitted, by e- mail, to the Dissertation Committee. Students are encouraged to enroll in HCS 6315: "Grant Writing for Researchers", in the summer before their second year, as this will provide training in crafting a Specific Aims Page. Once all committee members have agreed to serve on the committee, the pre-proposal and signed Committee Appointment Form, should be submitted to the Academic Support Coordinator.

The grant proposal is designed to provide students with experience in analyzing and synthesizing the research literature and in developing the rationale, literature review, and design of a potentially feasible and fundable study. Systems Neuroscience students should write dissertation proposals in NRSA style (6 pages maximum, in addition to the Specific Aims Page and references). The project can be related to a currently funded proposal in the laboratory but cannot be identical. The completed dissertation proposal must be submitted to the Dissertation Committee by September 1 of the third year.

After receipt of the proposal, dissertation committee members will have 1 month to review and score the proposal. The revised proposal is due by December 1 of the third year, and will include an Introduction (1 page maximum) describing the changes made in response to prior reviews. If the committee votes 'pass', the student proceeds to the oral defense of the proposal.

The Presentation of Dissertation Proposal (dissertation proposal defense) will be scheduled during the spring semester of the 3rd year. The defense will include questions related to background and relevant literature as well as the experimental design. There may be questions regarding why a particular experimental approach was chosen and what might happen if expected results are not obtained. If the committee votes to pass the student, the student proceeds to PhD candidacy.

If two or more committee members vote 'fail' following the oral defense of the dissertation proposal, the student may schedule a second oral defense no later than August 1. An independent faculty member appointed by the Associate Dean of Graduate Studies will join the committee evaluating the reexamination. If the majority of the committee votes to pass the student, the student proceeds to PhD candidacy. If the student does not pass the re-examination, he or she may be dismissed from the program.

Failure to meet these deadlines is grounds for dismissal from the program. Students are encouraged to work closely with mentors to submit their grant proposals to the relevant agency for consideration of

funding long before the due dates established by the program. However, submission to NRSA is not a requirement and has no impact on whether the student will proceed to PhD candidacy.

Systems Neuroscience Published Research Requirement:

Before the Final Oral Exam (Dissertation defense) can be scheduled (<u>Request for Final Oral Exam</u>), students in Systems Neuroscience must provide evidence of acceptance of a research paper in a peer-reviewed journal. Published papers or notification of acceptance from the journal may be shared, by e-mail, with the dissertation committee. The student should be the first author of at least one accepted journal article. This requirement is designed to give students the opportunity to write, submit, revise, resubmit, and publish their research with the guidance of their mentor and committee and it will prepare students for future employment in the field of neuroscience.

Qualifying Plan for Speech, Language and Hearing Sciences

Program milestones emphasize the development of scientific and critical thinking skills, as well as technical skills including publication, presentation, and grant writing skills. It is incumbent on students and advisors to collaboratively develop programmatic research activities in the first two years of enrollment and beyond. See Overview of Qualifying Plan – Speech, Language and Hearing Sciences for a summary of key events and deadlines for students in this track. In addition to promoting the development of professional skills in the above areas of scientific publication, scientific presentation, and grantsmanship, these milestones are scheduled to facilitate graduation within 5-years.

Year 1 Overview

During the first year of the SLH PhD program, students work with their mentor to become involved in a program of supervised research that is intended to ultimately result in one or more first and co-authored research papers. In addition, students develop a Research Project Prospectus (Dec 1) and Proposal (May 1), which systematically identify the background, rationale, and methods for a study that is expected to be initiated during the second year of PhD program enrollment. The overarching goal of the year 1 project prospectus and project proposal milestones is the demonstration of scientific writing and scientific thinking skills, including the ability to formulate testable scientific hypotheses and appropriate methodology for testing those hypotheses.

Year 1 Milestones

Milestone 1: Speech, Language and Hearing Sciences Research Project Prospectus

Students are expected to write a 1-page prospectus that broadly identifies the research area and goals that will be developed in the research project proposal; this document is to be developed in consultation with the student's research advisor and a secondary research advisor in an area that complement and extends training; this individual is likely to serve on the student's doctoral committee. Students must submit the research project prospectus and the Project Prospectus Approval form with both the Primary and Secondary Advisors signatures to the Academic Support Coordinator by **December 1** of the first year of study.

Milestone 2: Speech, Language and Hearing Sciences Research Proposal

Students should submit a completed research project proposal. The proposal will describe the rationale and methodology for the proposed research project; this document should include a review of the relevant literature and proposed methodology, and it is to be developed in consultation with the student's research advisor and other faculty, as appropriate for training goals. Students must submit the research project proposal and the Project Approval form with both the Primary and Secondary Advisors signatures to the Academic Support Coordinator by **May 1** of the first year of study.

Year 2 Overview

During the second year of the program, the overarching goal is to complete the manuscript milestone. This usually includes the completion of the of the project proposed in year 1, including the analysis and

interpretation of the data and preparation of this written report for peer review. Students also continue to engage in supervised research projects within and outside the mentor's laboratory, with specific projects and rotations identified in consultation with their primary advisor. At the end of year two, students submit a manuscript documenting their completed project. We expect PhD students to consult with mentors regarding the development of this report. Additional manuscripts related to their work on ongoing projects in the advisor's or other related laboratories, independent research projects, and systematic reviews should also be emerging as part of the development of an overall portfolio of scientific publications. Development of an early portfolio of publications supports success with student grant submissions, and an ongoing track record of successful dissemination of data in the peer reviewed literature will support career development in later years when competing for post-doctoral fellowships and/or initial faculty appointments.

Year 2 Milestone

Manuscript Submission

By the end of Year 2, SLH PhD students should be ready to submit their first manuscript for peer review. The manuscript must be submitted to the Academic Support Coordinator by **August 1** of the second year of study (i.e., the end of the second year of study). The submission should follow the specific formatting requirements for the journal the manuscript is being prepared.

If the manuscript has been submitted for peer review prior to August 1, documentation of the Manuscript's Submission for Peer Review should be provided to the Academic Support Coordinator. All manuscripts that are submitted for peer review will automatically be defined as "acceptable", having met the primary advisor's approval for release for external review.

In cases where students have not submitted their document for external peer review by August 1 or do not intend their manuscript for peer review, manuscripts will be reviewed and evaluated as "acceptable", "acceptable with revisions", or "not acceptable" based on the feedback provided by the primary and secondary advisors. A competently conducted Project will not be rated "not acceptable" due to disappointing data or the decision not to submit a document for external peer review. A local peer review panel will be assembled to assess manuscripts not subjected to peer review.

- "Acceptable" means that the student has satisfactorily completed the manuscript but is still working on final formatting, figures, or other technical details necessary for the final submission.
- "Acceptable with revisions" means that the advisors have recommended specific changes to the manuscript. Students should submit their final advisor-approved manuscript and forms within three months of advisor provided feedback.
- Ratings of "not acceptable" mean that there was a notable weakness in the rigor of the work as performed and/or deficits in the conceptual framework that the student has not satisfactorily addressed. Students must resolve shortcomings and submit a revised advisor-approved manuscript and forms within three months of the rating of not acceptable.

Year 3 Overview

During the third year, PhD students should continue to participate in ongoing and/or independent research within and outside the mentor's lab. In the third year, students present their completed project, write their dissertation prospectus (a short (1-2 page) summary of their proposed dissertation research) and form their dissertation committee, then write their Dissertation Proposal. The overarching goal of the year 3 milestones is to prepare students to successfully initiate and accomplish their thesis research. The Dissertation Proposal includes a detailed literature review that builds the theoretical framework for the dissertation research, providing a framework for the dissertation. The Dissertation Proposal also includes the proposed methodology for the dissertation research.

Students are strongly encouraged to enroll in HCS 6315: "Scientific and Grant Writing" or a similar course in the Fall of the third year to obtain training and support drafting the elements of a grant application. Enrollment in a grant-writing course during the Fall of the third year specifically allows mentoring and feedback on hypotheses and ideas at the same time the student is actively initiating work on their prospectus and dissertation proposal. The grant proposal can be submitted at any point in the first three years of enrollment or it can continue to be revised and polished for submission during the fourth year. Multiple grant mechanisms may be appropriate dependent on the specific training requirements for each student. Students are encouraged to talk with their mentors about project funding needs and potential funding sources.

Year 3 Milestones

Milestone 1: Oral Presentation

Oral presentation of the completed research project occurs during the **Fall or Spring of the Third Year**. During the oral presentation of the Project, the student will publicly present the completed research project and will answer questions about the research and the research area.

Presentations will be during the Callier Center Friday Seminars in Speech, Language, and Hearing (FLASH) series; students can request that other podium presentations be accepted in lieu of FLASH talks. Poster presentations, while greatly valued, will not be approved in lieu of the oral presentation requirement. The coordinator of the FLASH seminar series should be contacted the semester before the start of the third year to arrange for scheduling of the public presentation.

In addition to the project presentation at FLASH, all PhD students in the Speech, Language and Hearing Sciences track are strongly encouraged to present their research at the UTD-Callier Promotion of Academic and Clinical Excellence (PACE) poster session and other department, school, or university research events every year to develop skills delivering presentations to diverse audiences. Presenting at state, national, and international conferences is also highly encouraged for both networking and dissemination purposes and should be discussed with mentors on an ongoing basis.

Milestone 2: Dissertation Prospectus and Committee Formation

The dissertation committee should be formed by **December 1** of the third year. The committee members should be provided with a 1-2 page dissertation prospectus at the time of invitation to the committee. The Supervising Committee Requirements are specified in UTDPP1052 Policy on Procedures for Completing a Graduate Degree (https://policy.utdallas.edu/utdpp1052) and are discussed below under "Dissertation Committee".

Milestone 3: Dissertation Proposal

The Dissertation Proposal is expected to be submitted to the committee no later than **June 1** of the third summer. The Dissertation Proposal Requirements are specified in UTDPP1052 Policy on Procedures for Completing a Graduate Degree (https://policy.utdallas.edu/utdpp1052) and are discussed below under "Dissertation Proposal".

In brief, the proposal must include:

- 1. A tentative title of the dissertation describing the topic as accurately and briefly as possible.
- 2. The background of the research, including, as appropriate, the premise on which the proposed research is based, the hypotheses to be tested or concepts to be explored, and the methodology to be employed. This document should provide the conceptual framework of the proposed work and its relation to existing work in the field.
- 3. A timeline of the remaining research and thesis preparation activities, including deadlines for the completion of the final thesis milestones.

4. A set of up to five "key words" to assist in establishing the Data Base on Theses and Dissertations

Milestone 4: Dissertation Proposal Defense

The proposal defense should be scheduled to occur by **August 1** of the third year. The defense will include questions related to background and relevant literature as well as the experimental design and potential outcomes, among other topics. Following a positive committee vote, the student proceeds to PhD candidacy. If two or more committee members vote 'fail' following the oral defense of the dissertation proposal, the student may schedule a second oral defense no later than October 1 of the fourth year. An independent faculty member appointed by the Associate Dean of Graduate Studies will join the committee evaluating the reexamination. If the majority of the committee votes to pass the student, the student proceeds to PhD candidacy. If the student does not pass the re-examination, he or she may be dismissed from the program.

Year 4 Overview

During the fourth year, PhD students should be actively engaged in the conduct of dissertation research; they should continue to participate in ongoing and/or independent research within and outside the mentor's lab time permitting and in consultation with their committee. If the student has not already submitted their grant proposal prior to the start of year 4 of their program, this should be completed by December 1 of the fourth year. The overarching goal of the grant proposal requirement is to provide students with additional practical experience in synthesizing the research literature and in developing the rationale, literature review, and design of a significant, innovative, feasible and fundable project.

Year 4 Milestone

Speech, Language and Hearing Sciences Grant Proposal

The grant proposal must be submitted by **December 1** of the fourth year.

Speech, Language, and Hearing Sciences students may write grant proposals in NIH NRSA style. This includes Research and Training Plans, Biosketch, and other relevant sections or they may choose to follow the guidelines of any other agency (NSF, ASHA Foundation, other professional societies, charitable organizations, or other agencies agreed on by the student and the mentor) to which they intend to submit their application.

The specific timing of the Grant Proposal should be determined in consultation with the mentor and should be based on the submission deadlines associated with the funding mechanism which the grant is written for as well as the timeline during which grant funding will be most beneficial to thesis research conduct. A fundable application reflects the student's emerging independent research program and may be related to, but also differentiable from, the mentor's work.

Students are encouraged to work closely with mentors to submit their grant proposals to the relevant agency for consideration of funding long before the due dates established by the program. The student will submit the signed Grant Approval Form along with a hard copy of the Grant and documentation of the Grant's Submission for Peer Review (if submitted) to the Academic Support Coordinator no later than December 1 of the fourth year. Submission of the grant is not a requirement and funding decisions on submitted applications have no impact on whether the student's PhD candidacy; this information is required solely for program outcome tracking purposes.

Milestones List

Year 1:

Project Proposal Prospectus (12/1) Project Proposal (5/1) Year 2:

Manuscript submission to Department (8/1)

Year 3:

FLASH talk

Committee formed (12/1)

Dissertation proposal (6/1)

Dissertation proposal defense (8/1)

Year 4:

Grant Submission (no later than 12/1)

Year 5:

Dissertation Defense (per Graduate School Spring deadlines)

THE DISSERTATION

The <u>Office of Graduate Education</u> summarizes requirements and deadlines for completing the dissertation. The information below provides more detailed information on the dissertation for PhD students in BBS.

Dissertation Committee

The **dissertation committee** oversees and assists the student in developing a dissertation proposal and conducting the dissertation research; the committee also reviews and evaluates the written dissertation the Final Oral Exam (dissertation defense). To form a dissertation committee, the student works with the research advisor to identify at least four potential committee members from among the BBS faculty. One of these four, the Chair, must be a tenured or tenure-track faculty member in BBS. Occasionally a student may wish to appoint a co-chair from another university (e.g., if the student plans to conduct a substantial amount of the dissertation research in that off-campus lab) or a non-tenure track faculty member who has relevant expertise. However, the student should recognize that scheduling committee meetings and obtaining signatures can be difficult when committees include off-campus members. <a href="https://documents.org/linearing/l

Students may form a dissertation committee whenever they choose, but they are not permitted to submit the dissertation proposal to the committee until the proposed members have been approved by the BBS Graduate Studies Committee and by the UT Dallas Dean of Graduate Education. To do this, the student must submit a signed Committee Appointment Form and a 1-2 page prospectus of the dissertation with reference citations to their Academic Support Coordinator for review by the BBS Graduate Studies Committee. The Graduate Studies Committee may choose to add an additional committee member if they feel additional expertise is necessary to effectively guide and evaluate the student's research. Final approval of the dissertation committee by the UT Dallas Dean of Graduate Education is required before the student submits the dissertation proposal to the dissertation committee for review.

Dissertation Proposal

The **dissertation proposal** is a comprehensive prospectus for the dissertation. It includes a rationale, statement of the problem, specific hypotheses, discussion of relevant literature, methodology and procedures, a plan for statistical analysis, and when appropriate, pilot results. It is generally assumed that the student will have completed relevant research with the supervising professor and that the dissertation proposal is an outgrowth of that research. Although preparation of the dissertation proposal is overseen by the dissertation Chair, it is important to keep other members of the committee informed of progress and, where appropriate, to invite their critique of the rationale, design, and proposed methods of data analysis. Once formed, the dissertation committee must meet at least once/year to review the student's progress toward completion of the proposal and final dissertation.

If previously collected data, either archival or collected by the student, is to be used in the dissertation, the source of the data must be divulged to members of the dissertation committee in the proposal and at the proposal defense. This does not include pilot data used to justify the project, but it does include any data collected before the proposal defense that the student intends to include in the dissertation. Students should be aware that the dissertation committee may question the validity of archival and prior collected data and have the authority to reject these data. For that reason, students should inform committee members early of the source of their data and not continue to collect data that committee members view as potentially flawed.

When the proposal is completed, the student presents the proposal to all members of the dissertation committee for review. When the committee members are satisfied with the proposal including, where applicable, the use of previously collected data, and believe the student is ready to be formally evaluated by the School's faculty, they will sign the <u>Dissertation Proposal Meeting</u> form requesting a public defense of the dissertation proposal. The student submits this form and the approved dissertation proposal to the Academic Support Coordinator.

Scheduling the Dissertation Proposal Defense

The Academic Support Coordinator schedules the dissertation proposal defense at the request of the dissertation committee Chair. All faculty and students are invited to attend the dissertation proposal defense, and the faculty must be notified of it at least two weeks in advance. The student must also submit a copy of the dissertation proposal to the Academic Support Coordinator at least two weeks in advance of the defense for faculty members who wish to review it. The dissertation proposal defense may be scheduled only on days when the Academic Calendar shows that classes are in session – not on University holidays, Reading Days, Final Exam Days, or between semesters.

In no case may the public defense of the dissertation proposal take place until the student has passed all qualifying paper and project requirements including brown bag presentations, and the Graduate Dean has approved the dissertation committee. For PhD students working in Cognition and Neuroscience - Cognitive Neuroscience track, Speech, Language, and Hearing Sciences, and Psychology, the dissertation proposal defense should be held no later than February 1 of the student's 4th year. For PhD Students working in Systems Neuroscience the dissertation proposal defense should be held no later than May 15 of the 3rd year.

Format of the Dissertation Proposal Defense

To begin the dissertation proposal defense the student presents the background and goals of the proposed research and the methods to be employed. The student then answers questions from members of the dissertation committee and others in attendance. Following the conclusion of questions, all members of the faculty in attendance vote on whether the student demonstrated mastery of the theoretical issues and empirical findings in his or her field of specialization and was able to present and defend the proposed dissertation research in a manner commensurate with the PhD degree. Faculty in attendance may offer recommendations to strengthen the project; although the student and dissertation committee are not bound to accept them it is assumed that these recommendations will be given careful consideration. Passing the dissertation proposal defense is by vote of the majority of faculty in attendance; the conducting chair records the vote, and voters record their names and signatures, on the Public Presentation of Dissertation Proposal Form. The student submits this signed form to the Academic Support Coordinator; the form is then sent to the UT Dallas Dean of Graduate Education along with a letter from the School stating whether the student passed the dissertation proposal defense.

Students who fail the first dissertation proposal defense are permitted to use the same procedures to schedule a second dissertation proposal defense that must be held before the end of the following

semester. Students who fail the dissertation proposal defense a second time or do not hold the second defense before to the end of the following semester will be dismissed from the PhD program.

Scheduling the Final Oral Exam (Dissertation Defense)

After passing the dissertation proposal defense the student carries out the dissertation under the supervision of dissertation committee Chair with assistance from other committee members. The student writes the dissertation manuscript according to guidelines available at the Office of Graduate Education website, and submits the manuscript to the dissertation committee for review. When the dissertation manuscript is approved by a majority of the dissertation committee, the student emails the Academic Support Coordinator to schedule a room for the Final Oral Exam. The student then completes the Request for Final Oral Examination form and obtains signatures of all of the committee members. The student will submit this form, the dissertation, and an unsigned formatted signature page to the Thesis and Dissertation Submission website. A Graduate Reader will review the dissertation for formatting and email the student with necessary corrections. Students should review the Checklist for Final Submission of Doctoral Dissertation on the Office of Graduates Education site for information and deadlines concerning review, approval and submission of the final dissertation document.

Format of the Final Oral Examination (Dissertation Defense) The final oral examination is administered by a faculty member appointed by the Graduate Dean and is open to the public. Students should review the Thesis and Dissertation Guide available on the Office of Graduate Education website, as well as the <a href="Policy on Procedures for Completing a Graduate Degree (UTDPP1052). When the student passes the defense, he or she obtains the signatures of the dissertation committee members on the original signature page. The student will then upload the signed signature page to the Thesis and Dissertation Submission website and follow the submission directions on the Checklist for Final Submission of Doctoral Dissertation on the Office of Graduates Education site.

SUPPORT FOR DOCTORAL STUDY (Policy currently under review and subject to change)

Graduate Assistantships:

Financial support for full-time doctoral study is available in the form of teaching and research assistantships. Teaching assistants are appointed by the Graduate Studies Committee while research assistants are appointed by individual faculty PIs. The number of teaching assistantships available each year is determined by the annual budget while the number of research assistantships depends on the funding of faculty extramural grants.

Each Teaching and Research Assistantship carries an obligation to provide 20 hours/week of work outside of work done for course credit or independent study and research. Although an assistantship is considered a half-time position, full-time students are expected to give full-time effort to graduate study and research including fulfilling the obligations of their assistantship.

All students funded by teaching and research assistantships are awarded tuition scholarships covering the cost of tuition and fees (resident and non-resident). These scholarships cover a maximum of 9 credits in the fall and spring semesters. SThe scholarship covers a maximum of 6 hours for students who need to enroll in the summer. Students wishing to enroll in more than the standard number of credits in a semester will have to pay tuition and fees for the additional credits.

Teaching Assistants:

Teaching Assistants (TAs) are appointed expressly to contribute to the instructional activities of the School. TAs participate in the TA "Pool" for 10 hours/week; they spend the remaining 10 hours/per week carrying out various assignments under the supervision of the research advisor. Students in the TA Pool are assigned to assist instructors in specific BBS courses, typically large undergraduate classes, classes

Students are notified by e-mail of their TA Pool assignment before the start of each semester. Attempts are made to assign students in areas related to their interests, but depending on School needs there may be occasions when students are assigned as TAs to courses outside their discipline. Students are provided sufficient guidance to perform well in these roles.

Each semester, one or more students are assigned to the "extra duty TA pool." Students in the extra duty pool are not assigned to specific courses, but are on call for 10 hours/week to proctor exams and handle clerical and other work related to courses. Betsy Winter, Academic Project Manager, supervises the extra duty TA pool and will directly contact students as needed.

When students receive their TA Pool assignment, they should contact the faculty member to whom they are assigned. Any time conflict regarding your TA responsibilities and the courses in which you are enrolled need to be resolved quickly. In such an event, contact Dr. Stillman and Betsy Winter.

Teaching assistantships are awarded on a 9-month basis. Opportunities for teaching assistantships in the summer depend upon need in particular coursework areas, student progress, and available funds. Students who request summer funding will be notified in April. If you do not plan to be here during all or part of the summer or prefer to relinquish your duties in order to concentrate on completing your projects, inform Dr. Stillman. Students planning to spend time off campus that would interfere with summer term TA or RA duties should not request summer support, as the performance of TAs and RAs is evaluated and a failure to meet assistantship obligations could affect future assistantship support. Contact your Department Head if in doubt about your summer schedule. Students not assigned as TAs or RAs during a summer term remain eligible for re-appointment in subsequent semesters.

Research Assistants:

Research Assistants (RAs) are selected by and assigned to specific faculty-initiated extramural grants, and RAs are not obligated to serve in the TA Pool. The specific assignments and responsibilities of RAs are decided by the grant's Principal Investigator but usually include participation in research as well as the clerical duties that support research.

TA and RA Salaries and Appointments:

The salary of TAs is set by the School. The salaries of RAs are set by the Principal Investigator of the grant to which the student is assigned and equal to or exceed TA salaries.

Students supported on RA positions lost through expiration of a grant are typically offered TA positions if they are in good standing and making acceptable progress toward the degree. However, the salary of students transferred to TA positions will be at the TA rate rather than at the rate the student earned as a RA.

TAs are appointed from August 16 to December 31, from January 1 to May 15, and from May 16 to August 15.

Renewal of Assistantships:

Annual renewal of assistantship support depends upon student progress and timeliness in meeting program requirements, as well as the availability of assistantship funds. Students should not anticipate TA funding for the duration of their time in the doctoral program and whenever possible should seek opportunities to obtain RA positions. More than four years of TA support requires a special request to the Graduate Studies Committee and normally is approved only when it is clear that the student has made good progress and is nearing completion of the degree.

Students or faculty may request transfer of assistantships at any time for any reason. Such requests must be initiated through and are considered by the Associate Dean for Graduate Studies. Research Assistants are selected by a grant's Principal Investigator (PI), and a student may decline a PI's request for appointment.

Assistantship Responsibilities During Semester Breaks:

TA duties normally extend from 4 working days before classes begin through the last day of final exams, but TAs for courses with final exams that occur late in the exam period are required to work until grading is completed or the due date for submitting final grades to the Registrar. These dates are published in the University's official Academic Calendar each semester. Variations to this schedule must be approved by the student's research advisor, the instructor of the course for which the student is a TA, and the Department Head.

RAs may be expected to follow the University's Human Resources Staff Calendar rather than Academic Calendar, which results in shorter intersession breaks. To avoid misunderstandings, RAs should check with their supervisors early each term to clarify expectations about working during intersessions.

TAs planning travel (other than approved travel to professional meetings) that might interfere with their duties must receive approval in advance from their Department Head. RAs planning such travel must receive approval in advance from the Principal Investigator of the grant. Students should not make travel arrangements or purchase tickets before the absence has been approved.

As noted above, students anticipating extended absences during the summer sessions should not seek TA support, even if the travel is in conjunction with data collection for dissertation research. All TAs are expected to be available for the duration of the summer sessions whether they are assigned to a course or to the extra-duty TA pool.

The University does not permit students supported as TAs or RAs be employed elsewhere. Doctoral study can cause both financial and personal strains, but it is in everyone's best interest for students who feel unable to devote full time to their studies and assistantship obligations to resign their assistantships and shift to part-time status, or to seek a leave-of-absence. In general, students in good standing who temporarily resign their assistantship may be reappointed when they return to full-time status.

TAs and RAs must sign the <u>TA/RA Responsibilities</u> form before they begin their assistantship. Additional information on graduate assistantships is available at the <u>Office of Graduate Education</u> site, including University policies related to graduate assistantships, <u>UTDPP1075</u>.

Other Grants and Scholarships:

Students are strongly encouraged to apply for pre-doctoral grants and fellowships as well as private scholarships for which they may be eligible. Students awarded Federal pre-doctoral fellowships receive supplemental travel funds and other financial benefits from the School in recognition of their achievement. In no case will such a student receive less salary support than a TA, regardless of the terms

of a Federal pre-doctoral award. There are also scholarships funded by School endowments for which PhD students are eligible. There will be a call for applications each spring and students are encouraged to apply.

Travel Funds: (Policy currently under review and subject to change)

Funds are available to help defray the cost of travel to one major, national professional meeting per year (Sept 1 – Aug 31). Currently, the amount is \$1000. To be eligible for travel funds a student must be the first author on a poster or oral presentation accepted at a professional meeting. Students should submit the Student Request for Travel Support form to their Academic Support Coordinator as soon they are notified of their acceptance to present at the meeting, and they should not make any travel arrangements before speaking with Susie Milligan, the School's Fiscal Officer, who will direct them to the Administrative Assistant who will be handling their travel reimbursement once it is approved by the Graduate Studies Committee. Plane fare will only be reimbursed for a round trip to and from the single destination where the conference is being held and the airline ticket must be purchased through the University travel agency. There are very rigid rules regarding reimbursement for travel and students who don't follow the rules will not be reimbursed for their expenses. Some professional meetings offer competitive student travel scholarships and students are encouraged to apply for these to supplement travel funds awarded by the School. Students are not permitted to divide their travel award to cover attendance at more than one meeting.

Dissertation Support:

To help offset costs associated with conducting their dissertation research, PhD students who have passed all of their qualifying requirements are eligible to apply for matching grants of \$500 from the University's Office of Graduate Education and BBS (total \$1,000). These funds can be used for travel, participant compensation, and materials needed to conduct the dissertation research. To request dissertation support the student should submit the PhD Research Small Grants Program Application form to their Academic Support Coordinator at least six weeks before funds are needed. The application request must be endorsed by the Department Chair and funding is contingent on approval from the School's financial representative.

The Office of Graduate Education provides information on additional sources of funding support for dissertation research.