University at Buffalo
Department of Communicative Disorders and Sciences
College of Arts and Sciences

Welcome to the CDS PhD Program

Disclaimer: This manual supplements but does not supersede Graduate School policies. In case of unintended conflict, Graduate School policy prevails.

You have chosen to pursue advanced research training. Through the program, you will gain knowledge and skills to become an independent researcher. Many individuals with a PhD go on to postdoctoral, research scientist, or professor/faculty positions. Others go into industry in a wide variety of technology, scientific communication, nonprofit, and other sectors.

The exact make-up of your PhD program experience is (largely) up to you, with guidance from your primary mentor. An estimated timeline of major milestones is provided below. In general, you will take coursework that supports the completion of your research. You will undertake two pre-dissertation projects under the guidance of a faculty mentor with a defense of each study. You will complete an independent dissertation under the supervision of a primary mentor. In addition, you may also engage in other research, teaching, and service work throughout the program. Please refer to the PhD page of the CDS website for an overview of degree requirements in the department. The Graduate School website is another helpful resource.

Table 1: Estimated timeline of major milestones

Milestone	Typical timeline
Coursework (excluding CDS 699 and CDS 700)	Years 1 to 2 *3-4 years of coursework may be necessary if graduate-level coursework cannot be applied.*
Project 1 (3 credits of CDS 699)	Years 1 to 2
Project 2 (3 credits of CDS 699)	Years 2 to 3
Dissertation (CDS 700)	Years 4 to 5

The speed of program completion can be shorter or longer than 5 years, depending on several factors. Some examples that may shorten your program length include needing to do less coursework (e.g., relevant coursework from a master's degree in Speech-Language Pathology, Psychology or an AuD in Audiology, may be applied to your PhD credit hour requirement) and securing permission to opt out of Project 1 if a relevant master's thesis or audiology doctoral capstone with publication has been completed. Some examples that may extend the duration of

your program include needing to revise project or dissertation milestones, changing research directions, or taking leaves of absence.

Teaching is an integral part of PhD training, whether you pursue a career in academia (where teaching is a requirement) or other careers (e.g., good teaching means you can also be a good science communicator). Students appointed to a departmental Graduate Teaching Assistant (TA) position are expected to devote at least a portion of their 20 hour per week TA position supporting education activities in the classroom in collaboration with the faculty mentor. Typically, students begin supporting teaching activities of their faculty mentor with assistant level activities (e.g., holding office hours, guest lecturing, assisting with course prep and/or grading), with the expectation that they will serve as the instructor of record for an entire course at some point during their PhD program. The Department chair will work with students and their primary mentor to identify the appropriate course assignment and semester of teaching during their program. Students should plan to engage in structured and independent learning opportunities to advance their teaching knowledge and skills (see Teaching and Mentoring Resources for UB Doctoral Students, and read scholarly articles (e.g., from the journal *Teaching and Learning in CSD*).

Details on logistical aspects of completing the PhD program follow:

Primary Mentor

To remain in the program, a student must have a primary mentor in CDS who is a full member of the Graduate Faculty. In general, academic faculty in CDS serve as full members and clinical faculty in CDS serve as associate members of the Graduate Faculty. At the time of admission to the program, all PhD students are matched to a primary mentor with research expertise aligned with their interests who is a full member of the Graduate Faculty. The primary mentor is typically the committee chair for Project 1, Project 2, and the Dissertation. With permission of the Department Chair in consultation with the Director of the PhD Program and/or Director of Graduate Studies, a student has the option of changing primary mentors at any time during the program. It is the responsibility of the student to identify and secure a primary mentor in the CDS department with research expertise matched to their interests. If a suitable primary mentor is not available (e.g., mentor with appropriate research expertise is not accepting students into their lab, a student's research interests do not align with any CDS faculty member), the student may be dismissed from the program.

Students are encouraged to seek out additional informal mentors. One mentor cannot cover all professional development and personal growth needs. Committee members on projects and dissertation may serve as additional mentors. Students may also consider mentors in other departments (e.g., through UB NEAR program), or mentors in the CDS department but who are not serving on project committees.

Funding

PhD students receive funding to support their success in the program. Funding typically includes tuition remission and a stipend. The source of funding will dictate certain aspects of your pay, including the amount of stipend support, the number of months of stipend support, and the activities required for stipend pay. In most cases, the expectation is that students are engaged 20 hours per week in these positions. The two primary PhD student positions are:

Graduate Teaching Assistant (TA)

Students funded as a TA are supported by a departmental (state) line which encompasses the academic year (e.g., late August through mid-May). This position requires supporting teaching activities as assigned by the supervisor. In most cases, the supervisor might also assign research-related activities. Typically, the supervisor is the primary mentor (e.g., supporting the primary mentor's teaching activities). TA lines are 10-month positions, covering Fall and Spring semesters. A stipend is provided during the appointment period in accordance with the UB PhD Excellence Initiative level. TA appointments also include a full-time tuition scholarship during the academic year. TA appointments do not continue in the summer (see summer funding below).

Graduate Research Assistant (RA)

Students funded as an RA are supported by a research grant. This position requires completing the activities specified in the grant as assigned by the supervisor, whether the grant is awarded to the student or the faculty member. Typically, the supervisor is the primary mentor (e.g., supporting the primary mentor's grant activities). RA lines are variable in length (typically 10-month or 12-month positions) and stipend amount, depending on a variety of factors, but must align with levels stipulated by the UB PhD Excellence Initiative. RA appointments also include a full-time tuition scholarship during the academic year.

Summer funding

The department strongly encourages faculty to provide funding for PhD students in the summer to ensure continued timely research progress. Because there is no requirement that PhD students register for course credits in the summer to maintain continuous enrollment in the program, tuition scholarship monies in the summer are generally not available. In addition, for students appointed on a TA line (and potentially as an RA) during the academic year, there is no guarantee of a summer stipend. Sometimes the primary mentor (or another CDS faculty member) may be able to move a student from a TA line to an RA line for the summer months. Students without summer funding may need to find an additional income source by securing an on-campus job (e.g., writing tutor, food service worker, research assistant in another department), off-campus job in the community (e.g., lifeguard, camp counselor), or scholarships. *If the student does not have summer funding in the primary mentor's lab, research progress is expected to be paused or slowed during the summer.*

Degree Requirements

Credit Hours

Students are required to earn 72 credit hours over the course of the program. Up to 12 credits of dissertation research (CDS 700) may be applied towards the required 72 credits. In addition, up to 36 credit hours of post-BA level coursework can be applied to the PhD program. For example, students entering with a master's degree or doctorate of audiology may seek permission to apply up to 36 of those credit hours/coursework towards the required 72 credits for the PhD for courses associated with a grade of "B" or higher. Ultimately, the primary mentor in consultation with the Department Chair/Director of Graduate Studies/PhD Program Director must approve any/all prior coursework a student seeks to apply toward the required

72 credits for the PhD. Final approval rests with the Graduate School. Note that the Graduate School recommends completing the Graduate Student Petition for Transfer Credit form early on in your PhD Program.

Generally, students are required to register for a minimum of 9 credits of coursework each semester. However, once students have met the required 72 credits for the PhD (with CDS 700 included), they may be able to apply for Full-Time Status which will allow them to take fewer credits per semester and still be considered "full-time."

Required Courses

There is a set of required courses:

- Minimum of 6 credits of CDS 699, aligning with Project 1 and Project 2 work
- 3 – 12 credits of CDS 700, aligning with Dissertation work
- 6 credits in a statistics sequence (e.g., STA 527 and STA 528)
- 3 credits for research ethics or CITI training completed at 80% or higher ○ *Note that CITI training is required to do research.*

More on coursework in the next section.

Grades

Maintenance of a 3.0 GPA or higher is required each semester. Grades lower than a B- will not count toward the 72 credits required for the PhD. Failure to maintain a 3.0 GPA will result in academic probation with no guarantee of university funding for the subsequent semester. Failure to achieve a 3.0 average during the probationary semester will result in dismissal from the program.

Full-Time Study and Residency

The PhD program in CDS is a full-time program; part-time study or enrollment is not permitted. During the program, students are expected to maintain fulltime residency in the western New York area during the academic year and to be physically present in the department/mentor's lab on a regular basis (e.g., multiple days per week). If students are paid during the summer, this requirement continues for the summer. PhD students are expected to attend departmental events, including colloquium presentations and professional development meetings (e.g., grant writing workshops, trainings related to diversity, equity, and inclusion, other students' proposal and defense meetings, talks by guest speakers, etc.). Students may also be interested in attending events and meetings hosted by other departments (e.g., Center for Cognitive Science, Rehabilitation Science Seminar Series, The Graduate School).

Time Limits

Doctoral degrees must be completed within seven years from the student's initial formal matriculation in the doctoral program. Requests for extensions of time limits must be petitioned through the Graduate School using the Extension of Time Limit to Complete a Degree Program form. Students must maintain continuous registration until the degree is conferred unless a formal leave of absence is granted and approved. Note that summers are not counted in continuous registration, and a minimum of one credit CDS 700 each Fall/Spring semester is sufficient for students who have successfully advanced to candidacy.

Research

PhD students are expected to be engaged in active research through the duration of the program. This includes completing two pre-dissertation projects (Project 1 and Project 2) and the dissertation. Students are expected to grow in their research independence as they progress through the pre-dissertation projects into the dissertation. Note that the final written document for Project 1 should be approved by the committee prior to the proposal meeting for Project 2, and the final written document for Project 2 should be approved by the committee prior to the proposal meeting for the dissertation.

More information on the pre-dissertation projects and the dissertation can be found in later sections.

Coursework

The exact plan of coursework is likely to change based on the availability of course offerings. Making a tentative coursework plan is helpful to ensure the required coursework is completed and to get a sense of knowledge and skills that are needed to be successful in research.

Credit hour expectations

UB follows a credit hour expectation that each 1 credit hour is equal to 3 hours of learning and instruction each week. Thus, a 3-credit course would have a weekly expectation of 9 hours of weekly learning and instruction.

Considerations for selecting courses:

- Independent Study (CDS 600) is a topic-focused course determined by the instructor (e.g., learning a new method, focused discussion on a topic). Doctoral Theory and Research (CDS 699) is to advance pre-dissertation projects. Research (CDS 700) is to advance dissertation research.
- One way to consider which classes to take is to think about having a set of courses that are "depth" (e.g., normal and disordered speech, language, or hearing) and a set of courses that are "breadth" (e.g., rehabilitation, health equity). There is not a required number of courses for breadth and depth. CDS 699 and CDS 700 would not count towards depth or breadth.
- Taking the third stats course in the STA sequence and/or other advanced statistics, coding, or methods courses is always a great idea if there is room for additional coursework, particularly if those advanced courses are relevant to successfully completing your dissertation research.
- Students should consult with their primary mentor and fellow PhD students on courses to take.

Pre-Dissertation Research Projects

Students will complete Project 1 and Project 2 (i.e., pre-dissertation projects), each completed within 1-1.5 years. Projects need to clearly demonstrate the PhD student's depth of knowledge. Ideally, projects will provide preliminary data, methods development, and/or theoretical direction to motivate the Dissertation. Students should demonstrate a growth in independence from Project 1 to Project 2 (e.g., Project 1 is often an assigned project by the mentor, while Project 2

is a co-developed project with greater student ownership and leadership in completing study tasks).

Each pre-dissertation project must have a committee composed of a minimum of 3 faculty members who are full members of the Graduate School. Two of the members must be in CDS, including associate graduate faculty (i.e., clinical faculty). The primary mentor will serve as the Chair of the committee.

Project requirements:

- Proposal document and meeting with committee (non-public) ○ Proposal document should include a literature review, proposed methodology, and expected results (suggested length of 3-6 pages). The intent of the document is to provide committee members with sufficient background and scope of project.
    - The proposal document should be shared with the committee members at least 2 weeks in advance of the proposal meeting.
    - During the proposal meeting, committee members will discuss the proposal with the student and may ask the student to follow up with supporting information for the final written document.

- Final written document and oral defense (public) ○ The final written document should be a complete paper in a publishable form. Committee members should be given a minimum of two weeks to read and evaluate the completed document in advance of the defense. It is recommended to share the public defense meeting time and location with the department at this time.
    - Public defense presentations of the Projects are required. Members of the public will be allowed to ask questions.
    - Each member of the committee will vote to pass (with or without revisions) or fail the project oral defense and written document. The vote need not be unanimously positive, but must be a majority positive vote. The major advisor must also vote "pass". If revisions are requested, it is up to the committee member(s) requesting revisions whether they want to review a revised version of the final document or leave the final decision to the committee chair. If the project fails, a second opportunity to defend will be allowed. Failure to successfully pass a Project 1 or 2 will result in program dismissal.

Opting out of Project 1

Students who completed prior research at the graduate level, most typically a master's thesis or audiology capstone project, may be able to opt out of some or all requirements of Project 1. A project committee should still be formed to evaluate and accept (or reject) prior work to replace Project 1 requirements.

For example:

- A student who completed a master's thesis or audiology capstone project and published the work in a peer-reviewed journal as lead author can count the thesis as their Project 1. No public defense is required, with the publication serving as the written document.
- A student who completed a master's thesis or audiology capstone project but did not publish the work as lead author can extend the thesis to become the Project 1 (e.g.,

collect additional data, complete additional analyses). In this case, the student will need to pass an oral defense with a written document.

Dissertation

Students will complete a dissertation to demonstrate their independence in designing, conducting, and reporting on a comprehensive research project that is an original contribution to the field as determined by the PhD student's department. The primary mentor will supervise completion of the research project, but the PhD student will be responsible for leading all aspects of the project.

There must be a dissertation committee composed of a minimum of 3 core faculty who are full members of the Graduate School. CDS further requires that the committee includes 3 CDS faculty, which may include clinical faculty who are associate graduate faculty. Note that if a clinical faculty member is the third CDS faculty member on the committee, a fourth full member of the Graduate School will be required. The primary mentor will serve as the Chair of the committee.

Dissertation Requirements:

- Proposal document and oral defense (public and non-public)
    - The proposal document may take one of the two following formats agreed upon by the committee:
        - An NIH-style proposal (F31 Predoctoral Fellowship application) which consists of an abstract, specific aims, significance, innovation, and approach sections. Current NIH guidelines should be followed. The committee may request an extended Introduction to supplement the F31 materials.
        - A traditional dissertation proposal document consisting of literature review, proposed methodology, and expected results.
    - The proposal document should be shared with committee members at least 2 weeks in advance of the defense meeting. It is recommended to share the public defense meeting time and location with the department at this time.
    - After the public presentation and questions from the public, a closed meeting will be held with the student and committee. At the end of the meeting, the committee must vote on the acceptability of the dissertation topic and proposal document. The vote is pass (with or without revisions) or fail. The vote need not be unanimously positive to designate "pass", but must be a majority positive vote. The major advisor must also vote "pass". If revisions are requested, it is up to the committee member(s) requesting revisions on whether they want to review a revised version of the final document or leave the final decision to the committee chair. A failure of the dissertation proposal must be accompanied by a recommendation of the committee (e.g., a revision of the proposed topic, method, or analysis plan). If the dissertation topic fails, a second opportunity to defend will be allowed. Failure to successfully pass the dissertation proposal upon a second attempt will result in dismissal.
    - *Passing the dissertation proposal moves the student into ABD (all but dissertation) status. The department recommends that students submit their*

Application to Candidacy upon successful completion of the dissertation proposal.

- Final dissertation document and defense (public and non-public) ○ The final dissertation should be a full document with literature review, methodology, results, and discussion sections. The format must follow that outlined by the Graduate School. The final document should be given to the committee a minimum of two weeks in advance of the defense meeting. It is recommended to share the public defense meeting time and location with the department at this time.
    - After the public presentation and questions from the public, a closed meeting will be held with the student and committee. At the end of the meeting, the committee must vote on the acceptability of the final dissertation. The vote is pass (with or without revisions) or fail. The vote need not be unanimously positive to designate "pass", but must be a majority positive vote. The major advisor must also vote "pass". If revisions are requested, it is up to the committee member(s) requesting revisions on whether they want to review a revised version of the final document or leave the final decision to the committee chair. Each committee member must sign the M-Form to indicate their approval. A failure of the dissertation must be accompanied by a recommendation of the committee (e.g., a reanalysis of data). If the dissertation defense fails, a second opportunity to defend will be allowed. Failure to successfully pass the dissertation defense will result in dismissal.

Annual Review

Students will be reviewed annually to ensure adequate progression through the program, and to identify any needed resources or supports.

PhD students should meet with their primary mentor at the beginning of the Fall semester to set a plan for that academic year. The plan should have clear expectations for meeting relevant degree requirements, including research milestones, teaching activities, and service or other professional development activities. An individual development plan may be used to discuss and document the expected plan. You are also encouraged to hold a weekly meeting with your primary mentor throughout your program to facilitate training and degree progression.

PhD students will meet with their primary mentor at the end of the Spring semester to review progress made over that academic year, guided by the plan set at the beginning of the academic year. The results of this discussion are recorded and shared with the PhD Program Director. PhD students will also be required to provide a CV, unofficial transcript, and brief narrative descriptions of accomplishments and challenges faced over the past year to the PhD Program Director.

Annual review forms and documents will be reviewed by the academic faculty in the CDS department. The primary mentor will then review the discussion of progress with the student. Students who are not adequately meeting expectations may be placed on academic probation. The primary mentor and other relevant faculty will work with the student to establish a plan designed to help meet program expectations. Students will have one semester to meet the probation plan expectations, or they will be dismissed from the program.

Suggestions for being successful

- Treat the PhD program like a full-time job. Coursework plus TA/RA duties equate to roughly 40-50 hours of work per week. Not only does treating the PhD like a job help ensure that you have sufficient time carved out for completing required work but also helps you to develop work-life balance skills so that you can have a life outside of the lab.
- Take advantage of opportunities as they come. There is a lot of flexibility in your schedule to attend in-person or online talks/conferences, participate in summer bootcamps for methods or research topics, meet with other students and faculty, and more. This is a great time to start practicing networking and being a curious, life-long learner.
- Find opportunities to read and write grants. This may start out as reading your mentor's grant applications and then morph into writing your own scholarship and grant applications. Participate in grant writing workshops when offered. Grant writing is a skill that takes time to develop. The more examples you can see, the better.
- Pursue opportunities to teach, supervise, and/or mentor junior students as appropriate. Mentoring is a huge part of many post-PhD careers. Mentoring undergraduate and graduate students in the lab, participating in UB-run mentoring programs, and being a leader in the department and lab are practical ways to develop your mentorship skills.
- Research requires good project management skills. Developing project management skills will help you to be successful. Starting in your PhD program when you only have 1 or 2 major research projects to juggle at a time is much easier for developing new skills than when you have an academic faculty position where you are juggling multiple research projects, teaching multiple classes, and doing service work and mentorship of students. Project management skills include being able to create timelines or maps of project milestones; budget resources, time, and money; assess risk to anticipate roadblocks; and define project scope. Good organization, planning, and time management make projects go smoothly.
- Meet regularly with your primary mentor. Having strong communication with your primary mentor ensures that you are aligned on goals and expectations. You will drive the topics and regularity of these meetings, including coming prepared to the meetings with questions about research, teaching, professional development, etc. Regular meetings will allow you to take advantage of their mentoring and feedback on a continual basis. Consider setting an agenda for meetings in advance with your mentor.

AI Policies and Procedures

Recommended Use of Generative AI for Dissertations, Theses, and Capstone Projects

The Department of Communicative Disorders and Sciences at the University at Buffalo recognizes that generative artificial intelligence (AI) tools can be valuable supports in the development of dissertations, theses and capstone projects when used thoughtfully, responsibly, and transparently. Used well, these tools may help students sharpen their critical thinking by supporting activities such as brainstorming, exploring perspectives, organizing ideas, reviewing the literature, refining analytical processes and improving clarity of expression. At the same time, AI tools are meant to support, not replace, the student's own intellectual work, scholarly judgment, analysis, and authorship. Students remain fully responsible for the originality, accuracy and integrity of all submitted work, including carefully checking any AIassisted material, protecting sensitive or confidential information, and disclosing substantial AI use in accordance with university, departmental, and project-specific expectations.

AI Use by Activity Area

Idea development and critical thinking

Generative AI may be used to support early-stage thinking activities such as brainstorming topics, refining research questions, exploring alternative perspectives, identifying possible counterarguments, and clarifying complex concepts. In these cases, AI should be used to prompt reflection, comparison, and critical thinking, not to supply conclusions or replace the student's own reasoning.

Literature engagement and research support

AI tools may assist with preliminary literature-related tasks such as summarizing articles, identifying broad themes across sources, comparing perspectives, or helping students orient themselves to a body of scholarship. Students remain responsible for reading relevant sources directly, evaluating their quality and relevance, and ensuring that all interpretations, syntheses and citations are accurate.

Organization and project planning

AI may be used to help students organize ideas, develop outlines, map possible sections, or think through the structure of an argument or project. These uses are appropriate when they help students plan and refine their own work rather than generate the substance of that work.

Analysis and research workflow

AI tools may be used in limited ways to support aspects of research workflow, such as organizing materials, assisting with coding or scripting, identifying possible patterns, or helping students think through analytic options. However, any use of AI in analysis must be approached with caution. Students are responsible for independently evaluating all outputs, methods, and interpretations. AI should not be treated as an autonomous analytic authority, and the project's analytic decisions, interpretations, methodology, and conclusions must remain the student's own work and scholarly judgment.

Use of research data

AI may be used to facilitate analysis only when the data have been fully de-identified and when such use is consistent with university policy, applicable legal and ethical standards and, where relevant, approved research protocols. Students must not upload or enter identifiable,

confidential, unpublished, proprietary, FERPA-protected, HIPAA-protected, or human-subject data into public AI systems. When there is any uncertainty about whether data are sufficiently de-identified or whether the use of AI is permissible, students should consult their advisor, committee chair, IRB documentation, or other appropriate university guidance before proceeding.

Writing refinement

AI may be used in limited ways to improve grammar, readability, style, or clarity in the text the student has already drafted. It should not be used to generate core sections of a dissertation, thesis, or capstone project, to produce substantial original text on the student's behalf, or to paraphrase large sections in ways that obscure authorship. The final written work must represent the student's own scholarly voice, analysis, and intellectual contribution.

Accuracy, verification, and accountability

Because AI systems may generate inaccurate, incomplete, biased, or fabricated content, students are responsible for critically evaluating and verifying all AI-assisted material before incorporating it into their work. Responsibility for the accuracy, integrity, originality, and ethical use of all submitted work always rests with the student.

Transparency and disclosure

Students should acknowledge substantial use of AI in a manner consistent with the expectations of their advisor, research lab, clinic, committee or department. In general, uses of AI that materially shape the development, analysis, or presentation of a project should be disclosed. Students may also be asked to document how AI was used during the research and writing process in order to support transparency and responsible scholarly practice.

Faculty consultation and disciplinary judgment

Because expectations may differ across projects, methods, and subfields, students should consult with their advisor, committee chair, or program faculty when they are uncertain whether a specific use of AI is appropriate. Faculty guidance, disciplinary standards, and project-specific requirements should always take priority over general advice.