HUMAN DEVELOPMENT AND LEARNING SCIENCES (HDLS)

PhD HANDBOOK

Approved January 2026
This handbook applies to students admitted from Spring 2026 onward.

University of Pittsburgh | School of Education

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Description of the Curriculum

The following is a description of the course requirements for students entering the HDLS Ph.D. program with an undergraduate degree or a master's degree in an unrelated field. Table 1 presents an overview of the required courses. This is followed by a more in-depth description of the courses in each area.

Table 1

Overview of Course Requirements for the Ph.D. in Human Development and Learning Sciences

Requirements[4]	Classes	Credits
A. Core Courses	**4**	**12**
Theoretical Perspectives on Learning (TLL 3026)	1	3
Major Transitions in Context (HHD 3001)	1	3
Conceptualizing and Assessing Change (TLL 3025)	1	3
Community Engaged Scholarship (HHD 3002)	1	3
B. First Year Seminar / Writing Workshop	**8**	**9**
First Year Seminar (EDUC 3101)	1	3
Writing Workshop[1]	6	6
C. Research Methods and Statistics[2]	**6**	**18**
Quantitative 1 (EDUC 3100)	1	3
Quantitative 2 (EDUC 3103)	1	3
Qualitative 1 (EDUC 3104)	1	3
Research Methods and Statistics electives	3	9
D. Advanced Seminars / Directed Studies / Supervised Research[3]	**11**	**33**
Supervised Research	2	6
Electives	9	27
E. Doctoral Dissertation Research	**varies**	**0**
FTDG	varies	0
Total		**72**

[1] Writing Workshops are 1 credit courses taken over and above the typical 9-credit course load beginning in the second year of study.

[2] With advisor approval, students select a minimum of 3 additional research methods electives that will assist their scholarly development. This includes courses taken outside the School of Education.

[3] With advisor approval, students plan a coherent set of electives for their scholarly development. This includes courses taken outside the School of Education.

[4] Courses can be found on the SOE website at https://app.education.pitt.edu/courses/

Core Courses (12 credits)

The purpose of the core courses is three-fold: 1) to provide students with a solid and shared knowledge base in the two core disciplines (human development, learning sciences); 2) to develop students' abilities to critically analyze research, policies, and other educational artifacts (including standards for instruction and learning, assessments, and curricula) from the perspective of these core disciplines; and 3) to develop students' abilities to communicate to different audiences for different purposes (e.g., the academic community, policymakers, school district leaders, teachers).

First Year Seminar and Writing Workshop (9 credits)

Ph.D. students are required to participate in a school-wide first year seminar (EDUC 3101). This seminar focuses on familiarizing students with practical and ethical issues in research (e.g., necessary clearances for working in schools, resolving questions of authorship and authorship order, human subjects guidelines), and supporting students' work on their preliminary exam (Milestone 1) (e.g., developing innovative research questions, conducting a literature review).

Students will benefit from writing-intensive experiences to gain proficiency in the production of scientific articles and grant proposals. Beginning in the second year, students will enroll in ongoing writing workshops (1 credit per semester for 6 credits total). The writing workshops also provide students with an opportunity to get regular feedback on manuscripts and milestone documents.

Research Methods and Statistics (18 credits)

Students must complete three required research methods and statistical analysis courses (Quantitative 1, Quantitative 2, and Qualitative 1) and at least three more advanced research methods and statistics seminars to support their scholarly development. Courses can be taken outside the School of Education.

Advanced Seminars / Directed Studies / Supervised Research (33 credits)

All doctoral students must complete six (6) credits of supervised research before completing the Doctoral Comprehensive Examination (Milestone 3). In the HDLS program, these credits are typically taken during the completion of Milestones 1 and 2 and can be connected to a student's work in their research advisor's lab.

Students are also expected to take a minimum of nine (9) advanced seminars. The purpose of the advanced seminars is to develop expertise in a specific area aligned with the student's research interests. These courses must be approved by members of the HDLS faculty overseeing a student's Plan of Study. Courses can be taken outside the School of Education.

Seminars also can be taken as Directed Studies under the supervision of a faculty member. Students who pursue Directed Studies are expected to produce a written

document (e.g., the results of their study, a proposal for research, a literature review, etc.) at the end of the semester.

Teaching Practicum / Experience

Students do not have to earn teaching experience, although students who plan to seek positions in universities are encouraged to do so. Students who do pursue teaching experiences are required to take a 3-credit "Seminar in College Teaching" seminar. This consists of both a seminar and (simultaneously) a supervised teaching experience. The purpose of the seminar is to expose the student to the many issues of college teaching (e.g., course content and structure, student concerns). Working closely with a faculty supervisor in a teaching experience—whether as a volunteer or paid teaching assistant or teaching fellow—is to take place simultaneously with enrollment in the seminar. This seminar fulfills one of the 9 required advanced seminars.

The student and advisor decide how and when the teaching requirement might best be met. Several options are possible. Students who have been awarded assistantships or fellowships for teaching can sign up for the seminar and gain teaching experience with a faculty supervisor. Students may also volunteer to assist a faculty member teaching a course while enrolled in the seminar, with supervision by the faculty member teaching the course.

Dissertation Research (0 credits)

Students begin registering for dissertation "credits" (FTDG 0000) when they need 8 or fewer credits to complete their plan of study (they will enroll in FTDG in parallel with any remaining courses). Once all courses in the plan of study are completed, students enroll exclusively in FTDG. The timeline for FTDG enrollment usually coincides with the completion of Milestones 4 and 5. Students must register for FTDG credit during the 12-month period preceding their graduation.

Program Milestones

Program milestones are the backbone of the Ph.D. training. Students are urged to take all program milestones very seriously, as progress through them will not only determine timely movement through the program but also students' success in the job market upon completion.

Milestone 0: Plan of Study

By the end of the first year, students are expected to develop and gain approval for their future course work (Plan of Study) with their advisor and the Director of PhD studies in HDLS, completing a *Course Credits Accepted* form (for transfer credits) as needed. As students' interests may change, and course offerings may change within and outside the School of Education, students likely will revise (with approval) their Plan of Study over time.

Milestone 1: Preliminary Examination and Doctoral Study

All PhD students are required to complete an independent research project in year two. By the summer term of year one, students will submit a written proposal for their (pre-dissertation) research project. When the advisor approves the proposal, the student forms a preliminary exam committee comprised of three members (advisor and two additional faculty). The committee is chaired by the student's primary advisor and must include at least one other member of the HDLS program. This proposal, and the presentation of the proposal, will serve as the preliminary exam (Milestone 1). The purpose for this evaluation is to assess students' abilities to conceptualize a research project that is meaningful and "do-able," and to ensure that they are moving forward in ways that will build to independent research capable of asking and answering vital research questions at the intersection of learning and policy studies.

The specific characteristics that a proposal should demonstrate are the establishment of a historical context for the problem(s) analyzed, the synthesis of a broad and relevant literature base to explain the problem(s) under investigation, well-specified research questions/hypotheses, and an appropriate research design.

Passing the Milestone: The student defends the preliminary exam in a meeting of the committee, and the proposal needs to be approved by the unanimous vote of the committee. Other criteria for passing this milestone include whether the student is making satisfactory progress in their coursework (e.g., no unresolved incomplete grades) and in their work as a member of a faculty member's research team.

Admission to Doctoral Study: Completion of Milestone 1 is the essential element of a step the university calls "Advancement to Doctoral Study." This step has additional ancillary requirements including: An approved plan of studies; completion of at least 18 graduate-level credits at the University of Pittsburgh (i.e., two semesters of 9 credits);

and a cumulative GPA of at least 3.30 (a minimum GPA that students must maintain throughout their graduate studies).

Milestone 2: Pre-Dissertation Research Project

The Pre-Dissertation Research Project should be completed by the end of year two and entails completion of at least six (6) credits of Supervised Research. The student defends their Pre-Dissertation Research Project in a meeting of the same faculty committee from Milestone 1, with a unanimous vote required for a passing grade.

The criteria upon which the project will be judged include those described in Milestone 1 as well as clear writing and careful documentation and a well-executed set of statistical analyses and discussion of results that are of sufficient rigor to be published in refereed journals.

At the end of the Milestone 2 defense, the committee will first decide whether to pass the student on the basis of the written document and oral defense. A second decision relates to continuing in the program: In rare cases, the program faculty may judge that the student's overall progress in the program is not acceptable (e.g., multiple instances of poor coursework and/or unresolved incomplete grades, ethics issues, consistent poor performance on GSR or TA/TF work), even if they have successfully completed the requirements for Milestone 2. In this case, the HDLS program faculty would as a whole determine whether the Milestone 2 should be filed as a terminal (Master's) degree for the student, or whether the student should be allowed to continue in the Ph.D. program (or alternatively find another advisor or receive additional mentoring/scaffolding to address the specific issues).

Milestone 3: Doctoral Comprehensive Examination

Overview. The work during the first two years helps define the specific interests of the student and allows the student to become an increasingly independent investigator. Following completion of the Pre-Dissertation Research Project (Milestone 2), the student is expected to continue their engagement in research projects as well as move the Pre-Dissertation Project work towards publication.

The Comprehensive Exam, typically completed during the third year, gives the student the opportunity to critically examine the literature in their area of interest in order to develop a deep conceptual understanding of the theories and open research questions that will be relevant for their dissertation research. In addition, the exam serves as a more general training function: learning how to organize a literature and develop their own well-supported stance on that literature.

The comprehensive exam also serves an evaluative function. On the one hand, it allows the faculty to assess the student's mastery of a specialized topic and to judge the student's preparedness for a dissertation. On the other hand, it allows faculty to assess broader understandings of methods, question types, broader questions in terms within the context of a specific research area. To some extent, the student's comprehensive

knowledge of relevant topics will have been assessed in courses and seminars. But passing the comprehensive exam demonstrates that the student knows the theories and research methods that have developed around a set of related problems and can articulate the central current issues that they address.

Format. The comprehensive exam consists of a scholarly paper written on the student's specialty areas. The paper can be envisioned as a review paper that is of publishable quality. The paper can take multiple forms, including a literature review, theoretical paper, systematic review, scoping review, etc., but the student should work closely with their primary advisor to determine which methods are most appropriate given their research interests and the chosen topic. The paper should contain a critical, novel, coherent, and up-to-date review of a body of published papers in a focal area. A critical review is one that not only refers extensively to literature in some problem areas but also comments on the unsolved problems and methodological issues that have characterized the work on the problem. The paper should take a distinctive and new focus on the issues being reviewed and not merely describe studies.

A typical length would be about 40 pages plus references (assuming regular 11-12-sized font, conventional 1-1.5-inch margins, and double-spaced). The length of the paper shall not exceed 60 pages (double-spaced) excluding references, except as agreed by the faculty committee in response to a request by the student. The reference list should be substantial (30-to-50 references / 7-to-10-double-spaced pages would be typical for most papers).

Proposal. The student chooses a specialty problem in consultation with their advisor. A two-to-four-page prospectus describing the problem(s) to be addressed in the paper is prepared along with a three-to-five-page reference list. The reference list at this point is representative of the core literature to be reviewed rather than the complete list that will be part of the paper. The prospectus and reference list together comprise the comprehensive exam proposal. In addition, the student is encouraged to identify, and prepare to discuss, two or three published review papers that will serve as models for the style and approach that the student will take in their own paper.

When the advisor approves the proposal, the student forms a comprehensive exam committee comprised of three members (advisor and two additional faculty). The committee is chaired by the student's primary advisor and must include at least one other member of the HDLS program. Committee members do not have to be part of the graduate faculty but must have a faculty appointment. The student sends the committee members a copy of the proposal and schedules an initial meeting. During this meeting, the faculty present oral comments to the student about the proposal. These comments can help the student focus more clearly on the problems to be addressed and can raise areas of review that should be added to the proposal. If the proposal is accepted by unanimous vote, the student then formally begins the comprehensive exam. If the proposal is not accepted, the committee provides guidance concerning what steps might be taken to gain approval.

Exam Process. The comprehensive exam typically consists of three phases: 1) a reading phase, 2) writing phase, and 3) a revision phase that culminates in a final draft of the comprehensive exam. The comprehensive exam committee typically meets at the end of each phase to provide focused feedback to further develop the manuscript, and ultimately to evaluate the final product.

Reading phase. The comprehensive exam begins with a reading period, which is usually four weeks in duration. This time is spent largely in an "absorb-and-synthesize" mode, during which the student spends the bulk of their time reading the materials and jotting down key ideas and organizational schema. Ultimately, the student drafts an outline for the comprehensive exam, and a 5-to-10-page summary of key points. This outline and short summary is then distributed to the comprehensive exam committee.

Writing phase. Following approval of the comprehensive exam outline and short summary, the student is typically given four weeks to write a draft of the comprehensive exam. This paper should be a best-effort paper of the quality one would be willing to send to a journal. (It is not to be considered a "rough" draft, but a polished paper.) The paper may not be publishable, but it should reflect competence in scholarship, including writing, and some mastery of the issues addressed. It is expected that this draft could be improved via revision, as usually happens when papers are submitted for publication. Following this initial writing period, the student should distribute the draft of the comprehensive exam paper to each committee member. The members of the comprehensive exam committee are expected to provide both a written and oral critique of the document.

Revision phase. Following approval of the initial draft, the student is typically given two weeks during which to revise the comprehensive exam paper. The revision typically should include a letter to the committee (modeled after a letter included with a resubmission of a publication) that details the revisions and how the committee's suggestions were incorporated. At the end of the revision period, the final version of the comprehensive exam paper should be distributed and an oral exam should be scheduled. At the exam, the student is questioned about the problems addressed in the paper. The committee can be expected to probe the student's knowledge of issues and literature that are related to the topics covered in the paper, even when they are not actually discussed in the paper.

Duration. Once a comprehensive exam proposal has been approved, the student ideally will require only 10 weeks of effort to complete the exam – i.e., the sum of a four-week reading period, a four-week initial writing period, and a two-week revision period. This time frame excludes the time between the end of the reading, initial writing, and final revision periods that typically will be necessary for comprehensive exam committee members to read and evaluate the student's written material. Ideally, all of these meetings should be scheduled at the beginning of the comprehensive exam, with faculty given 5-10 days to evaluate the materials at each step. With these interim periods included, the comprehensive exam will typically extend across a 13-to-16-week interval.

The comprehensive exam committee has the authority to extend or modify the timing of the different phases of the comprehensive exam. For instance, a student may petition to have a four-week reading period, a three-week writing period, and a three-week revision period. Or a student may ask for the clock to be stopped for a short time during the comprehensive exam period so that they can prepare for and attend a conference, engage in a short phase of intense data collection, etc. Additionally, it is possible that the faculty may not approve the student to progress from one phase to the next without further modifications to be completed within a specified time frame. Such occurrences are expected to be rare, and the total amount of time given to the student to work on the comprehensive exam may not exceed 20 weeks, excluding the time required for faculty feedback.

Passing the Exam. It is expected that most students who have progressed beyond the completion of Milestone 2 will be able to successfully complete the Ph.D. program. However, it is possible to fail the comprehensive exam. In such an event, the comprehensive exam committee formulates a recommendation that is forwarded to the HDLS program faculty. The program faculty as a whole will determine the consequences of failing the comprehensive exam; potentially, a student can be given another opportunity to satisfy the requirement, or the student's participation in the program may be discontinued.

Relation of the paper to the dissertation. There is no prohibition against the student drawing from the text of the comprehensive exam in writing the dissertation.

Faculty role when the student is working on the paper. It is expected that discussions with committee members as well as other faculty and students will occur while the student is working on the paper. Such discussions, which characterize the way scholarly writing proceeds generally, are presumably a useful part of the comprehensive exam paper process. The only prohibition of help is that faculty should not be asked for comments on drafts of the paper or parts of it prior to the paper's completion and distribution.

Milestone 4: Dissertation Proposal and Research

Overview. The dissertation marks the end of the student's apprenticeship. The dissertation must be an original project. Although the dissertation may, and often will, relate to the advisor's research, it must represent a clearly distinct line of inquiry.

Proposal. The Dissertation Proposal process begins by selecting a doctoral committee. The student, typically during the fourth year, obtains approval from their advisor to form a dissertation committee. The University of Pittsburgh sets requirements for this committee. The dissertation committee, chosen by the student and advisor, consists of the research advisor and at least three other members, including one member from the graduate faculty in another department at the University of Pittsburgh or a faculty member at another university. In addition to the research advisor, at least one of the other

three members of committee must be from the HDLS program. The research advisor and two of the other three committee members must be members of the graduate faculty of the University of Pittsburgh. The program faculty, the department chairperson, and the dean/associate dean must approve membership on and subsequent changes in the doctoral committee.

In the proposal phase, the student works under the supervision of the research advisor to prepare an overview document. After the student has prepared the overview, which often takes a semester or more, the Overview/Prospectus Examination ("Overview") is conducted by the doctoral committee, chaired by the research advisor. The proposal must be unanimously approved at a meeting of the committee. Approval should be e-signed by each committee member shortly after the proposal is accepted. Following the meeting, the student must apply for Ph.D. candidacy to the FAS Graduate Dean's Office.

The format of the proposal is described below next to each dissertation track.

Track 1. The first follows a traditional path where a student conducts the proposed research studies, as outlined in their approved Dissertation Proposal. The prospectus must include a literature review (which may be only minor revisions of all or some of the comprehension exam paper), proposed methods, planned analyses, expected outcomes, and significance of the research. Experimental materials, survey copies, and the like may be added as appendices.

Track 2. Alternatively, with permission of their advisor and dissertation committee, students can opt to bring together a set of first-author (or sole author) papers that are intended to be submitted to peer-reviewed journals. Note that papers with shared first-authorship (with two or more co-first-authors) are ineligible because dissertation chapters must be the primary work of the PhD student.

The particular number and nature of papers that can make up the core of the dissertation is ultimately approved by the dissertation committee but will typically number two. In some cases, three papers may be approved. These papers cannot have been used to fulfill the requirements for Milestone 2 or Milestone 3. In addition to these papers as core chapters, students following this track must also have a substantial Introduction and Discussion that integrates the theories and results from the core chapters. This Introduction and Discussion text can draw on the student's Comprehensive Exam paper (as long as the text has not already been incorporated into individual study chapters) but must also integrate the material with studies in the dissertation.

For creating the proposal, the student and advisor should first discuss whether the default format (below) would work for the student's particular situation:

- Chapter 1: An overview of research literature that establishes the nature/importance of the overall dissertation topic and then clarifies the research gaps that then become the focus of the multi-study package.
- Copies of any completed articles, whether published or not
- Description of the proposed but not yet completed manuscripts
- Timeline for completion of the work

In order to have early input on the dissertation, the dissertation committee should be formed as early as possible. At least one of the proposed papers is expected to be pre-data collection (for studies that collect new data) or pre-analysis (for studies analyzing existing data) at the time of the Dissertation Proposal meeting.

At the Milestone 4 meeting, the committee will provide feedback on Chapter 1, decide whether the existing studies are of sufficient quality and coherence to be included in the dissertation, and provide feedback on any proposed but incomplete studies. The committee will decide to approve or reject the plan. The committee will request revisions and changes to be attended to before the dissertation defense, or, in the event of a fail, before the student attempts Milestone 4 again. The committee may also advise the student to switch to a traditional dissertation format if they believe that the Track 2 dissertation is not appropriate.

If the student and advisor believe that the default format does not seem the most appropriate, they should create a brief (approx. half page) explanation of their suggested alternative format (i.e., a pre-proposal), which must be sent to the committee for approval prior to writing the proposal.

Milestone 5: Dissertation Defense

Overview. Whether students choose Track 1 or Track 2, an appropriate research project must involve significant, original, and independent research work that is grounded in a body of literature. Students are highly encouraged to gain their advisor's approval to distribute their dissertation to their committee. At least 10 days before the scheduled defense, copies of the dissertation are to be distributed to the committee. The University of Pittsburgh has established a uniform set of formatting criteria for dissertations and theses that we refer to as "ETD" (Electronic Theses and Dissertations). The dissertation must be in ETD format in order to be deposited. For general information concerning preparation of the dissertation, refer to the ETD website at https://etd.pitt.edu/. Students are responsible for ensuring that their dissertation follows all guidelines and copyright regulations.

Defense. All HDLS dissertation defenses are open to any member of the university community. The student should schedule a large room and make sure that the defense has been publicly announced.

The defense is scheduled for 2 hours and divided into an open portion and a closed portion. The open portion is about 1 hour, beginning with a 30-minute presentation by the candidate, followed by an open question period in which all persons in attendance participate. The chairperson of the committee declares the open portion of the defense ended at their discretion. During the closed portion of the defense, only members of the committee are present; during this period, the student is questioned in depth about their research and relevant findings and how they fit with theories from the literature. At some point the student is asked to leave the room while the committee deliberates.

Approval. Approval of the dissertation itself occurs at the end of the defense. The committee must unanimously approve that the student passed the dissertation defense. The committee can decide to pass, pass pending revisions, or fail. If revisions are required, conditional approval can be given at the end of the defense, along with the set of steps that will be required prior to the final approval of the dissertation. Once a dissertation has been approved, the student is encouraged to publish it electronically using the procedures established by the University.

In the event of a fail, the HDLS faculty as a whole determine the consequences of failure; potentially, a student can be given another opportunity to satisfy the requirement, or the student's participation in the program may be discontinued.

Evaluation of Graduate Students

Students will be evaluated on the basis of the degree to which they successfully meet the expectations outlined above in a timely fashion.

Mentoring Committee

Each student will be assigned to a mentoring committee of three faculty members from the HDLS program. This committee advises the student concerning curriculum, provides oversight to the student regarding general progress in the program, and serves as a mentoring resource for the student. This committee has the responsibility of providing the student with a realistic assessment of performance, including putting the student on provisional status if appropriate. In order to facilitate communication and to avoid potential conflicts of interest, the chair of this committee cannot be the student's research advisor. Although there is likely to be an overlap with committees associated with the program milestones, this committee is independent of all other committees.

Self-Evaluations

Each spring, each student must submit a self-report form to the HDLS program that indicates relevant training activities, including papers written and presented, courses taken, skills acquired, teaching evaluations, etc. Each student should also include an updated Curriculum Vita.

Mentoring Committee Evaluations

First year students will have a fall and spring meeting with their mentoring committee to provide them with some early feedback on their progress and to address any initial difficulties that may have arisen before they become too serious. Students should come to the first-year mentoring meetings prepared to explain the design and logic of their Preliminary Exam (Milestone 1) research proposal, and before their meeting they should circulate to their committee members a bibliography of 5 articles that they have read related to their project.

Early each summer, each student is expected to schedule a coaching meeting with their advisor to discuss progress (students may want to use the advisor feedback form to help structure this meeting). In addition, each summer the Program Coordinator will notify all students to schedule meetings with their mentoring committees. Later in the summer, following these meetings, each student will receive a letter from the Program Coordinator detailing the program's assessment of that student's progress.

Timeline for Completing Program Milestones

All graduate students in the HDLS Program are expected to complete a doctoral degree in a timely fashion (5 years). To meet this goal, it is important that students and

faculty work together to ensure that each student is making appropriate progress and that the program's expectations are clearly communicated.

Faculty recognize that the progress of each student will vary, and for this reason rates of progress are defined in terms of various "zones," rather than specific cut-off dates for each milestone requirement. The three zones – green, yellow, and red – are defined below.

Table 2 below outlines the rate at which students are expected to progress through the milestones associated with the HDLS training program. The vertical, dotted red line shows the end of guaranteed funding.

Table 2

Timeline for Completing HDLS Program Milestones

	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6		
	F	S	Su	F	S	Su	F	S	Su	F	S	Su	F	S	Su	F	S	Su
milestone 1		X	X	X	X	X												
milestone 2				X	X	X	X	X	X									
milestone 3						X	X	X	X	X	X							
milestone 4									X	X	X	X	X	X				
milestone 5											X	X	X	X	X	X	X	

Green (optimal) zone: Completing each milestone requirement within a Year/Term that is coded as green will yield a doctoral thesis in the expected 5 years.

Yellow (cautionary) zone: This is considered to be a cautionary zone. For some students, spending time in the Yellow Zone is not a problem as long as milestone progress does not slip into the Red Zone. This is especially true if performance is otherwise high (e.g., coursework is strong, the student has multiple research projects, the work has resulted in conference presentations and journal submissions), or if the student experienced a temporary research or personal setback that stalled progress. For other students, time in the Yellow Zone may be viewed with a high degree of concern by faculty. This is especially true when the outer range of the Yellow Zone is approaching without a successful milestone event in sight, or when slow progress toward the degree is coupled with other signs of lackluster performance. There are multiple factors that may place a student in this less optimal position. These include unanticipated research setbacks, a nonproductive student-advisor relationship, personal setbacks caused by physical or mental health problems, a low degree of enthusiasm about the academic research track, or a sense of isolation from the departmental faculty and graduate student peers.

Regardless of the cause, it is imperative that students and faculty work together to identify the cause(s) behind a problematic level of performance and develop a plan for positive change. Students should not wait for faculty to determine that a problem exists – instead, if they are concerned about their progress they should confer with relevant

individuals (research advisor, program coordinator, etc.) to address relevant issues or concerns. Students in the yellow zone will receive a formal warning letter from the program coordinator indicating the steps (and required dates of successful completion of those steps) that need to be taken to avoid being placed on University Academic Probation and eventual dismissal from the student's doctoral training program.

Red (danger) zone: Students who reach the Red Zone will automatically be placed on Provisional Status. They may also be placed on University Academic Probation and will receive a formal letter outlining the steps that must be taken to avoid dismissal from the student's doctoral training program.

A student's rate of progress through the various training milestones provides a valuable internal measure of performance. But students should also be mindful that individuals who are external to the department will typically give substantially more weight to measures of achievement that appear in an individual's curriculum vitae. The most important of these measures is the number of peer-reviewed publications, especially first-authored publications. A variety of other measures, such as the number of conference presentations, history of honors and awards, and documented teaching and mentoring experience, also tend to receive close examination. With this in mind, the program has established the following recommended targets to help guide students and advisors:

1. Students are encouraged to present their work locally at least several times during their graduate career. There are multiple poster session opportunities each year and program-level talk series that provide valuable training opportunities.
2. Students should present a first-author poster or talk at a national forum at least once. Students interested in an academic research career should strive to leave the program with at least three national conference presentations, with at least two of these being first-author submissions.
3. Students should aim to submit their initial first-author publication by the end of their 3rd year. An earlier submission is preferable, and the lack of a submission by the end of the 4th year may be a point of concern. The first paper will often derive from Milestone 2.
4. Throughout training, students should aim to be working on 1-2 research projects at any given time (not necessarily all as the first author). The number of projects will depend on several factors, including the amount of effort each project requires, the research environment in which the student is situated, and the ability of the student to juggle multiple projects and responsibilities.
5. Students should tackle a dissertation project that is expected to produce at least one first-author publication. This work should be submitted within one year of completing the dissertation.
6. Students interested in an academic research career should strive to leave the program with at least two publications and a third published or planned from the dissertation. At least two of the published or planned publications should be first-author publications.

7. Students interested in an academic career should develop a teaching philosophy and record of teaching success. Students interested in a teaching career should have experience teaching two or more different courses.
8. Students are encouraged to take advantage of undergraduate mentoring opportunities, which can help develop and document research training and mentorship skills.
9. Students are encouraged to seek out and take advantage of opportunities to compete for fellowships and other academic awards. These can provide valuable sources of funding, and they serve as indicators of research quality and intellectual achievement.

Appendix: General Policies and Plan of Studies Worksheet

Transfer Credits

Students will be able to apply a maximum of 30 post-baccalaureate credits from a master's degree awarded by another institution to meet the minimum credit requirement. Each course must meet the following conditions:

- The course grade must be at least B or its equivalent.
- The course must be judged relevant to a student's doctoral Plan of Studies by the program or department.
- The course must be approved for equivalent graduate degrees at the accredited institution, extension, or off-campus center of other institutions at which the course was taken.

Required Online Training for Conducting Research with Human Subjects

The Institutional Review Board (IRB) mandates the completion of the Collaborative Institutional Training Initiative (CITI) training courses for all researchers and students.

Any member of the research team interacting or intervening with human subjects or their data, including faculty, staff, and students are required to have completed appropriate training prior to beginning the project (e.g., Responsible Conduct of Research, Social-Behavioral-Educational course).

In addition to these courses, HDLS requires students take the "Research with Children" elective, plus a second module of their choice within CITI. You will need to follow the instructions found at www.citi.pitt.edu to create a Pitt CITI account and complete the training.

Statute of Limitations

From the student's initial registration for doctoral study at the University of Pittsburgh, all requirements for the Ph.D. must be completed within a period of 10 years (or 8 years if the student has received credit for a master's degree appropriate to the field of study).

Cross-Registration Credits

Students may register for graduate courses at other institutions (e.g., Carnegie Mellon University, Duquesne University). Such work, if approved in advance by the student's advisor, will not be considered as transfer credit and may be counted for credit toward a graduate degree; the grade earned will be used in computing the student's grade point average. Cross-registration is only available in the fall and spring terms. Only full-time students may cross-register.

Full-Time Study

All Ph.D. students must register as full-time students (at least 9 credits) in the fall and spring terms.

Registration Status at Graduation

All graduate students must register for at least 1 credit or full-time dissertation study (FTDG for eligible doctoral students) during the 12-month period preceding graduation (that is, must be on active status).

Inactive Status

Students who have not registered for at least 1 credit or full-time dissertation study (FTDG for eligible doctoral students) during a 12-month period are transferred to inactive status and must file an application for readmission to graduate study (application fee required) before being permitted to register again. Students on inactive status cannot apply to graduate or take preliminary or comprehensive examinations. Also, students on inactive status are not eligible to use University facilities and should not expect to receive counseling from the faculty or active supervision by their advisor and committee.

Academic Standards

An average GPA = 3.30 is required in the courses that make up the program for any graduate degree. Students with full graduate status are automatically placed on probation whenever their cumulative GPA falls below 3.30. Each school determines the restrictions placed on a student on probation. A student on probation is not eligible to take the Ph.D. preliminary or comprehensive examination, or to be graduated.

Plan of Studies Worksheet

Students can use the worksheet on page 20 to map out their plan of studies in collaboration with their advisor.

Human Development and Learning Sciences PhD Plan of Studies Worksheet

Student Name:			Advisor Name:				
Course Category	**Credits Required**	**Course Number**	**Course Title**	**Term**	**Year**	**Grade**	**Credits Earned**
First Year Seminar	3	EDUC 3101	First Year Seminar				
Writing Workshops (6 credits)							
Writing Workshop	1						
Writing Workshop	1						
Writing Workshop	1						
Writing Workshop	1						
Writing Workshop	1						
Writing Workshop	1						
Core Courses (12 credits)							
Core	3	TLL 3025	Conceptualizing and Assessing Change				
Core	3	TLL 3026	Theoretical Perspectives on Learning				
Core	3	HHD 3001	Major Transitions in Context				
Core	3	HHD 3002	Community Engaged Scholarship				
Advanced Seminars (33 credits)							
Supervised Research	3						
Supervised Research	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Elective	3						
Research Methodology and Statistics (18 credits)							
Required	3	EDUC 3100	Introduction to Quantitative Methods				
Required	3	EDUC 3103	Quantitative Methods 2				
Required	3	EDUC 3104	Introduction to Qualitative Methods				
Elective	3						
Elective	3						
Elective	3						
Full Time Dissertation Guidance **After students complete 72 credits of course work requirements they should enroll in FTDG until graduation.**							
Dissertation	0	FTDG 0000					
						Total Transfer Credits (Maximum 30 from previous graduate coursework):	
						Total Pitt Credits:	
						Total Credits (Minimum 72):	