Ph.D. in Information Science & Learning Technologies

...the intersection of information and learning...
Contents

Introduction ........................................................................................................................ 2
Overview of PhD process in SISLT ................................................................................... 2
Degree Requirements ................................................................................................ 3
Program of Study Phase Activities .................................................................................... 4
  Doctoral Program of Study committee ........................................................................... 4
  Designing your Program of Study .............................................................................. 5
Residency Requirements and Plan ............................................................................ 5
Doctoral Program of Study Review Meeting .............................................................. 8
Building Your Portfolio ................................................................................................ 9
Qualifying Examination ............................................................................................. 10
Comprehensive Exams ............................................................................................ 10
Dissertation Phase Activities ........................................................................................... 11
  Dissertation committee ............................................................................................. 12
  Dissertation Proposal ............................................................................................... 12
  Dissertation Defense ................................................................................................ 13
Additional Resources ....................................................................................................... 14
Introduction

Welcome! This handbook is intended for admitted PhD students in University of Missouri’s School of Information Science and Learning Technologies. Our PhD program offers a unique opportunity for you to study and conduct research in the intersection of learning and information sciences. Our School of Information Science and Learning Technologies (SISLT) is proud to be an iSchool – which will provide our students and graduates with an enhanced set of resources and credentials.

This handbook contains:
- An overview of the PhD process in SISLT
- Requirements for each part of the process, including
  - Program course requirements
  - Residency requirements
  - Requirements for formation and membership of faculty committees you will work with.
  - A description of the qualifying and comprehensive exam processes and requirements.
- Links to required forms, and other resources.

Note – Contact your Advisor! This handbook is here to guide you – but making contact and working with your assigned advisor (as specified in your admissions letter) is key to your success and is also your responsibility. Your advisor is always a good point of contact for questions and concerns about your PhD program.

Overview of PhD process in SISLT

Figure 1 depicts an overview of the phases of the PhD process in SISLT. Note it is not intended to show durations (as in months for each phase), but rather the main milestones that will occur as you pursue your PhD.
This handbook begins with an overview of all degree requirements; subsequent sections address the details of both the Program of Study and Dissertation phases of the degree.

**Degree Requirements**

The SISLT PhD is designed to develop your competencies in the following three areas; see more about each in section Residency Activities.

System Design and Development
1. Research and Writing
2. Teaching

Figure 2 provides high level information on key components of the PhD program. Details follow.
Degree Requirements

Prerequisite Courses
IS&LT recognizes that students come to the program with diverse backgrounds. Your advisor and POS committee will work with you to determine which prerequisite coursework will be included in your program of study. Note, any transfer credits must be approved by your POS committee and the graduate school.

Doctoral Seminar Courses (9 credit hours minimum):
- Analyzing and Designing Systems (3 credit hours) fulfills College of Education Inquiry requirement
- Research and Theory Seminars (6 credit hours) (ISLT411)

Elective ISLT Coursework:
- Minimum of 18 credit hours or more of IS&LT coursework beyond master’s degree or prerequisites

Research Methodologies
- Minimum of 9 credit hours of research design courses with at least one course in qualitative research design and one course in quantitative research design

Support Field (9 Credit minimum)
- Coursework related to an area of emphasis outside of IS&LT and research courses selected in consultation with your POS committee

Residency
- See Residency section

Qualifying examination
- Occurs post program of study approval and before comprehensive exams.
- Assesses if you are making adequate progress towards the degree competencies

Pre Comprehensive Exam Portfolio
- Electronic portfolio that provides evidence of your having met the degree competencies of the PhD program and completed your residency plan. Portfolio to be completed and considered sufficient prior to your being able to sit for comprehensive exams.

Comprehensive Examination
- See Comprehensive Examination section

Dissertation
- 12 credit hours beyond all coursework

Internships
- Teaching – Independently teach a course or be a Teaching Assistant in a course
- Research – One or more preparations ready for submission to a journal or a refereed conference presentation
- Use the Doctoral Program Planning Sheet as the format for creating your program of study.

Figure 2. SISLT PhD Degree Requirements

Program of Study Phase Activities

A program of study is a “contract” of the courses you will complete and the activities you will perform to meet the PhD Degree requirements.

Doctoral Program of Study Committee

The Doctoral Program of Study Committee works with you to identify and approve a program of study (PoS), ensuring that you meet all minimum requirements of the IS&LT doctoral program. In addition, your Doctoral Program Committee helps you plan and execute other professional aspects of your degree program. This committee also approves requests for transfer of graduate credit and guides you through the comprehensive examination process.

Begin to form your committee soon after you are admitted to the program so that you
will have an agreed upon committee in place well in advance of your Program of Study approval meeting.

**Committee Membership:** The Doctoral Program of Study Committee must have a minimum of four members. At least three (one of whom is your advisor) of those four members must be from SISLT and one member must be an MU faculty member from a department or school other than SISLT. You and your advisor may determine that a fifth member for your committee is appropriate. In that case, the fifth member may be another SISLT faculty member, from another MU program, or from outside MU with specialized expertise.

**Designing your Program of Study**

Your program of study (PoS) will include:

- A proposed schedule of courses to meet the course portion of the degree requirements presented above, including any relevant courses completed prior to being accepted into the Ph.D. program. See the Doctoral Program Planning Sheet, on SISLT PhD Resource page.
- A Residency Plan (see requirements below), describing as explicitly as possible all of the Professional Immersion activities that you plan to complete outside of your coursework

**Residency Requirements and Plan**

The Professional Immersion Residency Requirement - referred to as the “residency requirement” is designed to help you articulate skills or competencies that you must exhibit prior to completing your comprehensive examination.

The requirement has two components: a duration of time of being “resident” on the MU Columbia campus, and activities that you will engage in (generally outside of coursework) to help you demonstrate your development as a professional in the field.

Residency is an opportunity to:

- Perform concentrated, uninterrupted work on your academic preparation through intense attention to coursework, projects, research, and active participation in academic life
- Become socialized in the values and norms of the profession
● Increase your levels of professional independence and responsibility
● Foster your transition from student to colleague
● Involve yourself in out-of-class interaction with fellow students and faculty on substantive issues
● Become involved in professional activities of various kinds
● Become familiar with professional resources and learn how to access and use them

Time Requirement: Residency includes a time period when you are predominantly a full time student on the MU Columbia campus, and is designed to “immerse” you in not only your coursework, but the culture of the department. This period of time will allow you to more fully engage in working with your fellow doctoral students and faculty, and participating in campus wide activities helpful to doctoral students.

Specifically, we require you to enroll for **six graduate credits applicable to your POS for two terms within a 12 month period**. During this period, you will also engage in activities that will enhance your research, teaching, and professional profile. Some examples are provided below. The specific combination of activities for your Residency Requirements will be determined in consultation with your Program of Study Committee.

**Residency Activities**

A description of the professional activities you will perform to meet residency – called your Residency Plan – is a required part of your Program of Study. This plan should be divided a description of activities you will engage under each of the following categories:

- Research and Writing
- Professional Service
- Teaching
- System Design and Development
- Professional Participation

Examples / suggestions for how to address each of these categories is further defined in the sub-sections below.

Your Program Committee will evaluate the residency plan. The following criteria will be used to evaluate the plan:
● Relevance to your professional goals
● Quality of participation
● Quantity of participation
● Variety of participation activities
● Demonstration of initiative
● Demonstration of collaboration
● Demonstration of independence
● Opportunity for written, oral, and electronic communication

Prior to your POS committee meeting, you should collaborate with your advisor on the construction of your Professional Immersion Residency Plan. Your Program of Study Committee will review your program and negotiate alternative or additional activities that you should complete prior to the Comprehensive Examination.

**IMPORTANT RESOURCE:** Use the Ph.D. Professional Immersion Residency Planning form (on SISLT PhD Resource page) to guide your Residency Plan development.

**Research and Writing**
- Author/co-author a research article
- Author/co-author a practice article
- Present a paper at a state, regional, national, or international conference
- Develop a grant proposal
- Contribute to a professional newsletter
- Critique a colleague’s research article draft
- Produce a working paper for discussion
- Conduct collaborative research with fellow students
- Conduct collaborative research with a faculty member
- Work as a research assistant

**Professional Service**
- Serve in a professional elected or appointed office
- Organize a professional conference
- Serve as chair/discussant at a professional meeting
- Serve on department, college, university, or professional committees
- Edit a professional newsletter
- Organize an invited speaker session
- Serve in a graduate student organization
● Serve as a journal field reviewer
● Organize study groups, seminars, forums, or a lecture series

**Teaching**
● Teach a course
● Develop course instructional materials
● Develop instructional evaluation materials
● Prepare instructional aids
● Work as a teaching assistant
● Proctor an exam

**System Design and Development**
● Manage a system development team
● Analyze a complex system and propose improvements
● Participate on a system development team
● Design a system prototype
● Articulate the parts and relationships in an existing system
● Use and review an existing system

**Professional Participation**
● Participate in a professional seminar
● Attend professional colloquia and seminars
● Attend national or international professional meetings
● Attend state or regional professional meetings
● Attend relevant professional presentations on campus
● Host visitors to campus
● Initiate and lead a seminar with faculty participation
● Participate in a study group or professional network
● Observe colleagues in an innovative or exemplary program
● Serve as a research subject

**Doctoral Program of Study Review Meeting**

You and your advisor will work together to develop your Program of Study (PoS) plan (Which includes your course work to meet degree requirements and your residency plan). After you have a solid draft of your PoS that has been approved by your advisor, you should schedule a meeting with your entire Program Committee.
The purpose of the meeting is to ensure that your coursework and residency plan will prepare you to write your dissertation and meet your professional goals. During the meeting, your committee will review your proposed PoS coursework and residency plans and recommend alternative or additional courses and residency activities that you will be required to complete prior to completing your comprehensive exams.

Committee acceptance of your Program of Study is indicated by the signature of each member of your Program Committee on the Doctoral Program Planning Sheet, your Professional Immersion Planning form (both on SISLT PhD Resource page), and the graduate school’s D2 Program of Study Form.

- The D2 Form (committee approval of Program of Study) is on the [Graduate school’s forms page].

**Building Your Portfolio**

Academics are required to regularly document their work. Shortly after you enter the program – and throughout your residency and professional immersion period -- you will begin constructing your online academic portfolio (see Figure 1). Your portfolio is how you demonstrate to SISLT faculty, and future colleagues and employers who you are, professionally, and what you study.

Your portfolio will demonstrate skills and knowledge in the following areas:

- Research and Writing
- Teaching
- System Development
- Professional Service
- Professional Participation

Your advisor can provide you with feedback on your portfolio; once you receive your advisor’s approval your entire POS committee will review the portfolio. They must judge that it sufficiently demonstrates your abilities in the above areas BEFORE you will be allowed to proceed with your comprehensive exams.

Note as well that your POS committee may question you regarding the contents of your portfolio at your comprehensive exam orals.

The design of your portfolio website is important! Look to other students’ portfolios as examples.
**Qualifying Examination**

Approximately one to two semesters after you have completed your POS meeting successfully AND BEFORE your comprehensive exams, you will be required to complete a qualifying examination.

The exam task will require you to complete a task that academic professionals would be required to perform. For example, we might have you provide a scholarly review of a journal or conference paper submission.

Further details are as follows:
- Your POS committee will provide you with the task.
- You will have one calendar week to complete the task.
- Your qualifying exam will be evaluated by your POS committee to determine your readiness to continue completing your POS and residency plans. You will receive either pass or a fail.
- If you fail, you will be allowed the option for one retake, timing determined by your POS committee. If you fail a second time, you will be removed from the SISLT PhD program.
- Successful completion: complete graduate school D-­‐1 form. Turn completed form into SISLT Student Services office.

**Comprehensive Exams**

The comprehensive examination is an assessment of your comprehensive knowledge of information science and learning technologies. It is your responsibility to inform your committee members of your intent to complete your comprehensive exam prior to the beginning of the semester in which you plan to complete the exam.

The comprehensive examination consists of three parts:
- Portfolio
- Written component
  - Week 1: Research Question
  - Week 2: Systems Question
- Oral Defense

The oral defense of the comprehensive examination is a public meeting and may cover any or all of the following:
- Any part of your portfolio
- Any part of your written component of the comprehensive examination
- Your defense of a particular point of view or philosophy
• An evaluation of your experience and professional growth as a result of graduate work to date

Additionally, the comprehensive exam includes an assessment of your knowledge of your support field. This information describes the comprehensive examination process related to your major (ISLT); the support field examination process varies from field to field.

**Results of the Comprehensive Exam**
The Program Committee will evaluate the comprehensive examination based on the rubrics posted on the [SISLT PhD Resource page](#) and then render one of the following judgments:
- **Pass**, indicating that you are ready to begin the dissertation;
- **Pass with Distinction**, indicating excellence in preparation and that you are ready to begin the dissertation;
- **Failure**, indicating you have not demonstrated to the Committee adequate comprehensive knowledge of the field. This could apply to a single or both of the written comps questions and/or the portfolio content or oral defense.

**Student Procedure after a Failure of the Comprehensive Exam**
You may request to attempt the examination a second time. If the Program Committee approves, the Committee will prescribe an additional course of study intended to better prepare you.

A student may be failed on the whole comprehensive exam, performance on one or more of the written questions, oral defense. If a student fails a portion of the comprehensive exam, the Program Committee has the option to allow the student to retake only that portion of the exam.

The second administration of the comprehensive examination cannot occur before at least six months have passed and you have provided evidence of extensive efforts to prepare for the examination. There will be no third attempt allowed.

**Important**: Refer to the [Doctoral Comprehensive Examination Checklist](#) on [SISLT PhD Resource page](#) to ensure that you follow the process.

**Dissertation Phase Activities**

**Important**: Refer to the Dissertation Checklist on [SISLT PhD Resource page](#) which contains deadlines and procedures, to ensure that you follow the process.
Overview (detailed sections to follow)

- Form your dissertation committee. Often this committee is similar to the committee that supervises comprehensive exams.
- Write your dissertation proposal
- Schedule and Defend your dissertation proposal. The defense must be scheduled during the Fall or Spring semester, and it must take place in a private room. Your committee must have your dissertation proposal in their hands 2 weeks prior to the defense.
- Implement the research plan outlined in your proposal, and collect your dissertation data
- Complete data collection and analyze data. Finish written dissertation.
- Schedule and defend your dissertation. Your dissertation committee must have your proposal in their hands 2 weeks prior to the defense.

Dissertation committee

- The Dissertation Committee must consist of a minimum of three SISLT faculty members and one member from a program other than ISLT, typically from your minor or supporting field. The Dissertation Committee chair must be a member of the MU doctoral faculty. A faculty member/practitioner holding a terminal degree from outside of SISLT who has expertise in your research may be added as a special Committee member with program approval.
- You are encouraged to include those faculty members who can best support your line of research as members of your Dissertation Committee.
- During your dissertation phase, you must maintain continuous enrollment at MU.

Dissertation Proposal

Your dissertation proposal is intended to demonstrate to your committee that you are prepared to conduct research and write the dissertation. Your dissertation committee must approve your conceptualization, argument, and methodology before you begin data collection.

The dissertation proposal should include the first three chapters (Chapter 1: Rationale for the Study, Chapter 2: Literature Review, Chapter 3: Description of Methodology). Your advisor is your primary guide for putting together a solid proposal. While other members of your committee may provide advice in their areas of expertise, it is generally expected that you will work most closely with your advisor to make sure your proposal is ready for committee review. In particular, the quality of your articles motivation and identification of a gap in present research should be articulated early in Chapter one. Chapter two should contain a literature review the builds on the
motivation in Chapter one. Chapter three should define a research plan, methodology and data collection approach appropriately suited to your area of inquiry.

Additional information is available from the Graduate School.

You will be required to schedule a dissertation proposal meeting with your dissertation committee prior to beginning your research. The proposal meeting is open to all faculty and students in the School.

During the meeting, you will make a short presentation. The Committee will then discuss the relevance and efficacy of the arguments and methods stated. The Committee may approve the proposal for continuation or recommend revisions to be completed prior to approval. You may be required to significantly revise the proposal and even hold a second proposal meeting before proceeding with data collection.

When the Dissertation Committee has accepted your proposal, you are then expected to complete your study according to the three chapters written and approved in your proposal meeting.

| After successfully defending your proposal, submit the SISLT Dissertation Proposal Prospectus Form (available on SISLT PhD Resource page) Form and a 3 – 5 page summary of your proposal to the SISLT student services office. |

Dissertation Defense

After you have completed your dissertation draft and received your Dissertation Chair’s approval, you may schedule your dissertation defense. A copy of your dissertation must be sent to each committee member at least two weeks prior to the defense meeting.

During the meeting, you will make a presentation of your dissertation research. The Dissertation Committee, other faculty, staff, and students may attend your dissertation defense and ask questions of you regarding your dissertation and your research. Audience members will be excused while the Dissertation Committee evaluates the dissertation and defense.

The Committee may approve the dissertation, approve the dissertation pending revisions, or fail the dissertation. For the dissertation to be successfully defended, the Dissertation Committee must vote to pass the dissertation, with no more than one dissenting or abstaining vote.

When you have successfully defended your dissertation and your committee has signed the D4 Dissertation form, you should return that form to the SISLT Student Services Archive Copy

SISLT PHD Handbook – September 2015
Office. You must also follow the dissertation formatting guidelines specified by the graduate school. The graduate school’s Thesis / Dissertation Checklist is helpful as you prepare your final dissertation submission.

Then go out and celebrate!

Additional Resources

SISLT Student Services Office
304 Townsend Hall
Columbia, MO 65211
573-884-4546 (Toll-free: 877-747-5868)
Fax: 573-884-0122
sislt@missouri.edu

And your assigned advisor!