Graduate Student Handbook

Ph.D. in Educational Psychology:
Educational Statistics and Measurement Specialization

NOTE: The information in this document is to be used as a guideline only. Every effort has been made to ensure that this document corresponds with official University documentation. In the event that this document deviates from official documentation, the official University documentation is to be followed.
# Table of Contents

Admission ........................................................................................................... 3  
Application Deadlines ...................................................................................... 3  
Assistantships .................................................................................................... 3  
Course Requirements ......................................................................................... 4  
Table of Course Requirements ......................................................................... 5  
Satisfactory Progress .......................................................................................... 6  
Outline of Requirements .................................................................................... 6  
Doctoral Committee ............................................................................................. 7  
  Selection of a Doctoral Advisor ....................................................................... 7  
  The role of the Major Advisor ....................................................................... 7  
  Doctoral Committee Composition .................................................................. 7  
  When to Appoint a Doctoral Committee ....................................................... 8  
Program of Study ................................................................................................ 9  
  Changes in the Program of Study ................................................................. 9  
Preliminary Examination ..................................................................................... 9  
  Application to Take the Exam ...................................................................... 9  
  Qualifications to Take the Exam .................................................................. 10  
  Evaluating the Exam .................................................................................... 10  
Dissertator Status ............................................................................................... 10  
  Dissertation .................................................................................................... 10  
    Advanced planning for the dissertation ..................................................... 10  
    Appropriate dissertation topics and methods ............................................. 11  
Dissertation Proposal Hearing ........................................................................... 13  
  Dissertation proposal format ....................................................................... 13  
Final Defense ...................................................................................................... 14  
  Dissertation format ....................................................................................... 15  
Graduation Procedure ......................................................................................... 17  
Registration and Length of Study ..................................................................... 17  
  Interruptions .................................................................................................. 17  
  Minimum Registration .................................................................................... 17  
  Length of Study ............................................................................................... 18
Admission
The prospective student must initiate an application to the Graduate School (https://apply.wisconsin.edu/). The application should indicate the student’s interest in pursuing the doctoral program in the Department of Educational Psychology. Two official copies of all undergraduate and graduate transcripts must be forwarded to the Graduate School.

Students must indicate their intended area of specialization on the application which will be reviewed by the graduate faculty in the area. Faculty in the Department of Educational Psychology have ultimate admission authority. Students are reviewed on the basis of letters of recommendation, academic credentials, GRE scores, and intended professional goals. A personal interview may be requested to aid admission decision. Space limitations and a match between student interests and faculty expertise also influence the decisions.

Students who wish to change their area of specialization to Educational Statistics and Measurement after admission to another specialization must seek an advisor in Educational Statistics and Measurement and must submit a new program of studies to the Educational Statistics and Measurement area for approval.

In addition to Graduate School requirements, general admission requirements include:

Graduate Record Examination - Applicants must submit verbal and quantitative test scores taken within five years of date of desired enrollment. We prefer a combined percentile score (verbal plus quantitative) of at least 100 for the verbal and quantitative tests with the quantitative percentile not falling below the 50th percentile. Applicants with lower scores may be admitted, but must show compensatory strength in other aspects of their preparation to be considered.

Letters of Recommendation - Applicants must have a minimum of three letters of recommendation from individuals familiar with the applicant's intellectual achievement and potential.

Application Deadlines
Admissions will be made for the fall semester of each year. The program's application deadline is February 1. Applicants should note that the graduate school’s recommended application filing date is January 1 for fall semester admission. Students who wish to be considered for university fellowships may need to apply for admission by the graduate school's recommended deadline.

Assistantships
Doctoral students are eligible to apply for teaching, research and project assistantships as well as fellowships through the Department of Educational Psychology in the School of Education and the Graduate School. The majority of students are typically awarded an assistantship. Students
may be awarded either a teaching assistantship or a program assistantship in the Consulting Office for Research & Evaluation in the School of Education (www.core.soe.uwm.edu).

Students are encouraged to apply for assistantships at the time of application. Various fellowships and awards are offered through the Graduate School. Students may contact the Graduate School, UWM PO Box 340, Milwaukee, WI 53201, or check http://uwm.edu/graduateschool/types-of-funding/ for more information. For information on assistantships offered through the School of Education, students should check SOE’s Graduate Assistantships webpage. For details of stipends for teaching or research assistantships, check the following Graduate School web page: http://uwm.edu/graduateschool/graduate-assistant-policies-procedures/#appendix_a

Course Requirements
Students pursuing a Ph.D. in Educational Psychology with a specialization in Educational Statistics and Measurement must meet all of the requirements of the Ph.D. in Educational Psychology with the Educational Statistics and Measurement Specialization. Students who enter the Ph.D. program without a Master’s thesis will need to complete a Master’s equivalent paper (the student’s advisor will determine whether the paper meets this requirement).

In total, doctoral students specializing in Educational Statistics and Measurement must earn a minimum of 54 credits beyond the Bachelor’s level, at least 27 of which must be taken in residence. This is a minimum requirement, and the actual program may exceed this minimum. Up to 12 credits earned prior to admission to the Ph.D. program may be counted toward the required credit total. Students entering the Ph.D. program with a Master’s degree may have other courses/requirements waived. A minimum of 36 credits (including thesis credits) must be earned following admission to the Ph.D. specialization in Educational Statistics and Measurement. In general, the courses taken as part of the Ph.D. research requirement will count toward this minimum total (See Table of Course Requirement). In addition to course work, the satisfactory completion of a Preliminary exam and a dissertation are required.

Course requirements include a minor, and at least one course in urban education.

Minor
Students may select from two options, A or B. Option A requires at least eight credits in one department outside the School of Education, while Option B requires twelve credits from two or more departments outside the department. Under Option B, students may select up to six credits from within the School of Education. Students using Option A will select a Minor Professor who will serve on the student's doctoral committee.
# Table of Course Requirements

## Required Courses in Psychological Foundations

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPSY 631</td>
<td>Cognition, Learning, Problem Solving and Thinking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDPSY 640</td>
<td>Human Development: Theory and Research</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Learning and Development Foundation Courses</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

## Required Course in Urban Foundations

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 701</td>
<td>Seminar in Urban Educational Issues or comparable course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

## Required Course in Educational Statistics & Measurement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPSY 624</td>
<td>Educational Statistics Methods I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDPSY 624</td>
<td>Educational Statistics Methods II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EDPSY 720</td>
<td>Techniques of Educational &amp; Psychological Measurement</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

## Minor Courses

<table>
<thead>
<tr>
<th>Option A or B</th>
<th>Elective courses in minor area (e.g., Math, Political Science, Psychology, etc.)</th>
<th>Credits</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>8-12</td>
<td>8-12</td>
</tr>
</tbody>
</table>

## Elective Courses in Educational Statistics & Measurement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDPSY 728</td>
<td>Techniques of Educational Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPSY 820</td>
<td>Multiple Regression &amp; Other General Linear Models</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPSY 821</td>
<td>Psychometric Theory and Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 822</td>
<td>Item Response Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 823</td>
<td>Structural Equation Modeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPSY 824</td>
<td>Advanced Experimental Design and Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 825</td>
<td>Multivariate Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 826</td>
<td>Analysis of Cross-classified Categorical Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 827</td>
<td>Survey Research Methods in Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 829</td>
<td>Instrument Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDPSY 832</td>
<td>Hierarchical Linear Modeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 922</td>
<td>Seminar in Measurement and Evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED PSY 929</td>
<td>Seminar in Statistics &amp; Research Design</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Other Electives as Approved by Advisor...

<table>
<thead>
<tr>
<th>Other Electives as Approved by Advisor...</th>
<th>Total Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>
For information on when Educational Statistics and Measurement courses are typically offered, please see the Educational Statistics and Measurement Course Rotation Schedule link on the Educational Statistics and Measurement website.

**Satisfactory Progress**

While every effort is made to prevent problems from occurring, if student progress is not satisfactory, the Educational Statistics and Measurement Psychology program faculty may choose to recommend dismissal from the program.

Students may be recommended to be dropped from the Ph.D. program under the following conditions:

1. Student has failed to maintain active status (enrolled in less than 3 credits per semester) without prior approval.
2. Student has not maintained a B average overall and B+ average in Educational Statistics and Measurement courses.
3. Student has not passed preliminary examinations or has failed their oral dissertation defense. Students may be given a second opportunity to pass preliminary exams or dissertation defense; however, this is at the discretion of the doctoral committee and Major Professor.

**Outline of Requirements**

The general progression and requirements for a doctoral degree are outlined in the figure below:

```
Major Advisor selected
           ↓
Doctoral Committee selected
           ↓
Program of Study developed
           ↓
Preliminary Examination
           ↓
Apply for Dissertator Status
           ↓
Dissertation Proposal Hearing
           ↓
Dissertation Defense
```
Each component is discussed in detail in the remainder of this handbook. Students should also refer to the graduate school web page at http://uwm.edu/graduateschool/doctoral-toolbox/ for the appropriate forms and requirements necessary to satisfy each component.

**Doctoral Committee**

**Selection of a Doctoral Advisor**

Upon admission to the doctoral program in Educational Psychology, students are assigned a temporary advisor. This person is available to discuss initial course selection and provide general advice about the program. After beginning the program and before filing a Program of Study, students should seek a Major Professor. The permanent Major Professor does not have to be the same person who is the temporary advisor. Selection of a Major Professor is by mutual consent between the student and the faculty member. Students should notify the Area Chair when the Major Professor has been selected or changed.

No doctoral advisor may serve as Major Professor for more than 5 students who are at or beyond the dissertator stage.

**The role of the Major Advisor**

The Major Advisor plays a key role in suggesting to the student, prior to the completion of course work, interesting issues and problems in the field. The Major Advisor can help the student understand what an important topic is, ways of approaching the topic to conduct a useful study, and how to carve out a manageable study which can be completed in a reasonable period. After completion of coursework, the Major Advisor should work out in advance with the student reasonable expectations for how to respond to the student's written drafts of the proposal or dissertation. Ordinarily, a student has a right to expect responses within several weeks after having submitted drafts to the Major Advisor or a member of the Doctoral Committee, providing they have been given advanced notice and agree to be available.

When members are polled during a hearing, the student should be asked to leave the room. In cases where a dissertation is part of a larger research project directed by the Major Advisor, the latter should clarify in advance the specific publication rights of the student.

**Doctoral Committee Composition**

The Committee consists of five members:

Maximum of three faculty members from the area of emphasis, including the Major Professor. One member from outside the department. If the student takes an Option A minor, this requirement is satisfied in that manner. Students taking the Option B minor must make certain that one Doctoral Committee member is from outside the department of Educational Psychology.

Ordinarily, all committee members must be members of the UWM Graduate Faculty. The only exception is for an external member (see below).
**External Members**

One member may be appointed who is not a UWM faculty member. This requires written approval from the Department Chair and Dean of the Graduate School. Students should submit a copy of the external member’s vita and a reason for the request in writing. The Dean of the Graduate School gives final approval.

Appointment of an external member is one way to fulfill the requirement that one member of the Doctoral Committee must be from outside the Department of Educational Psychology.

**Retired Professors**

Retired faculty may not be appointed as the student's Major Professor, although with permission from the Department Chair and final approval of the Dean of the Graduate School, they may serve as a Doctoral Committee member. A written request should be sent to the Department Chair for approval. Note that a retired professor is considered an external member. If a faculty member who is serving as a Major Professor retires, the Graduate School requires students to find another Major Professor.

**Expanded Committees**

If a student wishes to have a committee that exceeds five members, a request for an expanded committee must be submitted to the Graduate School.

**When to Appoint a Doctoral Committee**

At least four members must be appointed by the time of the Preliminary Examination, and all five members must be appointed by the time of the Proposal Hearing.

**Rationale for the Doctoral Committee Membership**

It is important that students give careful thought to the selection of Doctoral Committee members. Therefore, students are expected to provide a rationale for how the expertise of each member contributes to their Program of Study and proposed dissertation topic. This rationale should be submitted with the student’s Program of Study.

**Changes in Membership**

Students may change their Committee membership as their academic plans change. However, the change must be approved by the Major Professor. As a courtesy to a member who is being replaced, that member should be informed by the student. A formal notification of the change must be submitted to the Department Chair.
Program of Study
The purpose of the Program of Study is to assist students in carefully planning and executing a coherent program of coursework. Students must file a Program of Study by the fourth semester after being admitted to the Program. The Program of Study must be signed by a minimum of three committee members. If you are taking an Option A minor, one of the three committee members must be the Minor Professor. A Program of Study must be completed prior to taking the Preliminary Examination.

The specific courses that will be part of the student’s Program of Study are agreed upon by the Major Professor and the student. Students and Major Professors must be sure that the program satisfies the minimum requirements that are applicable to all students, outlined under Required Courses. The Major and Minor Professors may require courses beyond the minimum.

The Program of Study will be reviewed by the department chair for conformity with course distribution requirements and applicable standards. When it is approved, the original Program of Study will be retained by the Department, and copies are forwarded to the Graduate School and the student.

Changes in the Program of Study
Changes may be made at the discretion of the student. These changes should be reviewed and approved by the Major Professor.

Changes which have not been approved may lead to the denial of authorization to take the Preliminary Exam. Therefore, students should submit requested changes in a timely manner.

Program of Reading and Research Opportunities
Students are advised that apart from coursework, they should also develop a program of reading around their research interests, particularly as it might apply to a possible dissertation. Availing oneself of informal opportunities for research and scholarly dialogue outside formal coursework can also contribute to one's development in important ways. In short, the Program of Study reflects only one aspect of Doctoral preparation and should be developed in conjunction with other plans for professional growth.

Preliminary Examination
The Doctoral Preliminary Examination is a written examination that is taken at the end of a student's coursework. Its purpose is to indicate to the area whether the student demonstrates mastery of coursework and relevant subject matter and whether the student is qualified to proceed with dissertation planning.

Application to Take the Exam
The Application for the Doctoral Preliminary Examination is available at the graduate school’s web site. At the beginning of the semester in which the student is eligible to take the prelims, both the student and advisor must complete Sections I and II of the application. After the student submits the application to the Graduate School, eligibility is validated and the Graduate School completes Section III. After the exam, the examining committee members and department chair complete Section IV and submit it to the Graduate School.

**Qualifications to Take the Exam**

Students must have completed all coursework or be in the final semester. The Department Chair will review the student’s Program of Study to make certain that all requirements have been met.

**Note:** When not enrolled in classes but working on Preliminary exams, the student needs to enroll in an Independent Reading Course (990) for 1 credit.

**Evaluating the Exam**

The area will determine the format of the written exam and evaluate the written response.

Students who do not pass the Preliminary Exam will have one chance to retake it.

**Dissertator Status**

In general students are eligible to apply for dissertator status after successfully completing the preliminary examination. Other eligibility requirements listed at the Graduate School web site. The Application for Doctoral Dissertator Status (available at the Graduate School’s web site) can be submitted before or after the Dissertation Proposal Hearing. If submitted before the proposal hearing is successfully passed, the dissertator status application must include a summary of the dissertation research topic.

**Dissertation**

**Advanced planning for the dissertation**

Each student should begin planning for the dissertation soon after entering the Ph.D. Program and beginning course work. The Ph.D. Program in Educational Psychology is more than a series of course requirements. It is a period of intensive preparation and study, of which course work is one component. The most advanced stage of this preparation for earning the Ph.D. degree is completing the dissertation. It is important that students inform themselves early about what the dissertation entails and how to prepare themselves to undertake this task.

There are at least four advantages to beginning discussion of a possible dissertation topic early
rather than deferring it until after the Preliminary examinations are completed. First, course work can be selected more strategically. Second, some course requirements such as term papers may be tailored to explore emerging research interests, if the course instructor agrees to its appropriateness in the context of the course. Third, students with a possible dissertation focus in mind may arrange an Independent Reading as part of their course work. Fourth, a student who has done prior thinking about the dissertation is less likely to permanently become that most unfortunate of all classifications, "A.B.D." (all but dissertation). The high attrition rate in doctoral programs often occurs at this stage among students who are overwhelmed by the responsibility of designing and completing a dissertation.

Informal opportunities to conduct research also are important ways to prepare for the dissertation. The more a student is exposed to actual practice in conducting research while moving through the doctoral program, the less challenging the selection of a dissertation topic and the development of a research proposal will be. Students are encouraged to seek out such opportunities, and Major Advisors have a responsibility to encourage students to pursue such activities and help them arrange appropriate experiences. While full-time students can most easily engage in such experiences, there are a variety of ways part-time students also can avail themselves of such opportunities, sometimes at their own work sites.

**Appropriate dissertation topics and methods**

The Major Advisor and Doctoral Committee can help a student select an appropriate, manageable topic. A dissertation should represent original scholarship which makes a substantial and significant contribution to knowledge. The dissertation should demonstrate the student's competency to conduct and report research in the field of education and in the Specialization in particular. For a student who is planning a scholarly career, the study represents the first step in a program of systematic inquiry and scholarship. However, regardless of a student's ultimate career objectives, it is important to understand that the dissertation is a beginning in a program of scholarship, not a culmination. As such, it will be helpful for each student to develop an accurate understanding of what constitutes a substantial, significant study which will be manageable as well.

In this context "original" research means some heretofore unexplored topic. Ordinarily the work will be done by the student independently. However, when a student's dissertation is part of a larger project, the student should clarify in the dissertation proposal what the student's original scholarly contribution will be, independent of other students or the faculty member who originated the project.

As stated above, the dissertation research should be substantial. "Substantial" means simply that the research is not minor, that is, it has substance and depth. William Bowen in his 1981 President's Report at Princeton (quoted in The Role and Nature of the Doctoral Dissertation, Council of Graduate Schools, 1991) stated that the dissertation should be thought of "...not as a final magnum opus, but as a demonstration that (the student) has mastered the tools of independent research and has made at least a modest contribution to knowledge."
A substantial dissertation should also be significant. "Significant" refers to the choice of a topic and to the impact of the research. The study should, at a minimum, be useful to scholars and practitioners working in a field. A dissertation of exceptional quality may affect the way scholars and practitioners think about that field. Moreover, an exceptional dissertation will represent not only high quality research, but will be a significant document, reflected in the way the study is reported and written. While not every dissertation may rise to this description of being exceptional, every dissertation should be significant enough that a student will be able to present the study's findings at a scholarly conference and ultimately publish it in a refereed scholarly journal.

A replication of earlier scholarship done by others can represent a potentially significant dissertation topic. However, the student and Doctoral Committee should ask what original knowledge the replication study would generate. For example, if the replication tests a theory, model, or practice with a new population, of what potential significance for scholarship and practice is this new information?

Questions arise as to whether "survey research" constitutes a significant dissertation. No straightforward answer to this question is possible, and each student and Doctoral Committee must be the final arbiter. As a general guideline, however, it is useful to ask whether the findings would contribute in important ways to a knowledge base in the field, preferably at the level of creating or confirming a concept, analytical framework, model, or theory. If the study merely describes some phenomenon from the perceptions of actors, it should be asked what the study will contribute beyond the description itself.

A critical component of all dissertations is a significant review of the literature. A literature review should be current and thorough, reflecting an attempt by the student to be exhaustive. The student's Doctoral Committee will expect the literature review to demonstrate the student's mastery of the existing knowledge base in the proposed area of inquiry. Further, the review should be structured so as to point to the need for the proposed dissertation research. Ultimately, the task of writing a review of the literature may require many judgments as to what to include and exclude, what level of detail to provide, how to organize, and so on. These judgments are part of the process of defining the research problem which the dissertation will address.

Both the student and the Major Advisor have a responsibility to assure that the Doctoral Committee's membership reflects expertise concerning the subject matter as well as expertise on Educational Statistics and Measurement.

Considerable thought should be given to the fit between a research problem and the most appropriate design and methods for investigating that problem. A research problem should guide consideration of methods, not the reverse. Merely selecting a design because the student is familiar with particular research methods, or because a given design is convenient, irrespective of its appropriateness to the research problem, is not a desirable approach. The Major Advisor and Doctoral Committee should address this issue with the student at an early stage in dissertation planning.

It is also important to emphasize that whatever research tradition one is working within, research
methods must satisfy appropriate standards for the logic in use. Attention to research design considerations is as important as the prior selection of a research topic.

The Major Advisor and Doctoral Committee members have a major responsibility to clarify to the student whether a proposed study meets acceptable research standards. Although some design modifications may occur once a student has begun to conduct research (particularly in qualitative studies), a study that begins with a fundamentally weak design is almost never improved significantly after the research is underway. Accordingly, the time to correct important design problems is before approval is granted to proceed. Proposed studies which are weak in research design should be strengthened until they are acceptable and only then presented at the Dissertation Proposal Hearing. Doctoral Committees should defer approval of the dissertation proposal until the study is judged acceptable to all the Doctoral Committee members. Major Advisors should consult all members of the Doctoral Committee in reaching such consensus, preferably before the Proposal Hearing takes place.

Students are advised that any study involving human subjects must receive Protection of Human Subjects Review approval prior to proceeding. Guidelines are available from the Institutional Review Board at Mitchell Hall, Room 273 (229-3173), or on-line at www.uwm.edu/DeptIRSA/IRB/. Under some circumstances, an expedited review may be conducted directly within the School of Education. If your proposal meets these conditions, send the proposal to the decentralized reviewer in the SOE. Students should begin the approval process several months before planning to begin their research to account for possible delays. In any event, when developing a research design, students should give careful attention to ethical issues surrounding the conduct of their research.

**Dissertation Proposal Hearing**

The purpose of the Dissertation Proposal Hearing is to hear the student’s proposal for doctoral dissertation. In conjunction with the Major Professor, the doctoral student formulates a research idea and develops that idea into a formal written proposal. The approved dissertation proposal becomes the official document which guides the doctoral dissertator's research. Any deviations from the proposal must be approved by the student's entire committee.

The Doctoral Dissertation Proposal Hearing Form is available at the Graduate School’s web site. The student completes Section I of the form and forwards it to the major professor, who completes Section II at the time of the hearing. The form is then submitted to Graduate Student Services for final processing.

**Dissertation proposal format**

The proposal should be written in APA style format.
Section 1: Introduction

This section includes a discussion of the specific research problem and the need for the research in general. This section should include the theoretical framework, underlying research assumptions, and the significance of the problem and proposed study. This section should address why the proposed research would be an important contribution to knowledge and is, therefore, worth undertaking.

Section 2: Review of the Literature

This section should demonstrate the student's thorough familiarity with the research problem, what is known or not known about it, and should document the need for the research study which will be proposed in the following section.

Section 3: Design of the Study

This section outlines the research question(s) or hypotheses, the conceptual framework or theoretical constructs upon which the study draws, operational definition, the data collection methods (including sampling), a rationale for selecting these methods given the research problem, and methods of analysis. Procedures for protecting against bias and for protecting human subjects, where appropriate, should be addressed. Any instruments developed by the student may be appended to the proposal.

Section 4: Expected Results

This section should give some indication of the findings that are expected based on the framework outlined in the previous sections. While these expectations may or may not be confirmed by the actual results, the hypothesized outcomes integrate the theoretical framework presented in sections 1, 2 and 3 to allow an evaluation of the eventual results in this context.

Final Defense

The student should complete and submit Part I of the Application for the Doctoral Dissertation Defense and Graduation (through PAWS), and pay any associated fees, no later than the end of the second week of the semester in which he or she expects to graduate. The Graduate School then completes Part II of the application and sends it to the program unit for completion of Part III. After completing Part III, the application is returned the Graduate School where a Warrant is issued (at least a week prior to the defense) authorizing the final oral examination. The Warrant is the document the committee will sign on the day of the defense. If committee membership or the defense date changes, the Graduate School must be notified and a new warrant will be issued.

The final oral defense should be a forum for formally defending the student's completed work, not a place to make extensive corrections, although some of these may emerge from the discussion at the Defense Hearing.
A Defense Hearing should not be scheduled until all members of the Committee have been provided with a penultimate draft of the dissertation well in advance to permit a final reading. This draft should reflect prior changes requested by the Committee and not be merely a working draft. Readiness for defense, however, is not tantamount to acceptance of the dissertation. It means only that the committee is ready to hear the defense. The decision to hold a doctoral defense, moreover, is not entirely up to the committee. If a student insists on defending the dissertation before the committee believes it ready, the student may defend.

Students are advised to consult with the Major Advisor on how to prepare for the final oral defense of the dissertation.

**Dissertation format**

Students are advised to consult the Graduate School guidelines on technical aspects of layout and typing of the manuscript. Dissertations that do not follow those guidelines will not be accepted.

APA style format is required. The following guide is presented to advise the student and Doctoral Committee on a typical format. In some circumstances, particularly in the case of a study which has employed qualitative methods, a Doctoral Committee may approve a format which deviates from the standard set out below.

Ordinarily the dissertation will consist of five chapters:

**Chapter 1: Introduction**

This chapter introduces the reader to the significance of the research problem and briefly summarizes the nature of the study which will be undertaken to address this problem.

**Chapter 2: Review of the Literature**

This chapter parallels that in the dissertation proposal. It consists of a thorough review of previous research relevant to the study, leading to a demonstration that further research of the kind being undertaken will contribute important knowledge about the research problem.

**Chapter 3: Methods**

Again, this chapter parallels and expands on the relevant section of the dissertation proposal.

**Chapter 4: Results**

This chapter presents the findings of the study. The chapter’s organization ordinarily follows the research questions or hypotheses.

**Chapter 5: Discussion**
This chapter discusses the implications of the findings for theory and for practice. The significance of the research once again is reviewed, the specific contribution of the study as well as its limitations are pointed out, and suggestions for further research are offered.

Appendices and References

This section lists journal articles, books, and other sources that have been cited in the dissertation. The references should identify an item in sufficient detail so that readers may identify it. Check the current Publication Manual of the APA for information about specific formatting rules.

The Defense of the Dissertation

The dissertation oral defense occurs when the student and the Major Professor believe that the dissertation is completed and is of the expected quality demanded by the student's committee. The defense of the dissertation represents the final academic task for the doctoral candidate, and like the dissertation proposal hearing, the defense is public and open. It is expected that all members of the student's committee will be present at the final oral defense. Any anticipated exceptions must be approved by the department chair before the oral is scheduled.

The subject of the doctoral defense is the dissertation itself. The defense provides an opportunity for students to demonstrate their expertise following several years of preparatory course work, research, and writing. Students will also demonstrate their abilities to explain ideas and methods embodied in the dissertation and to defend the implications and conclusions of the research.

The defense allows selected graduate faculty members the opportunity to verify the student's independent, scholarly contributions. They may offer guidance regarding possibilities for publication of the dissertation and encourage further research efforts in the student's area of academic specialization.

At the conclusion of the defense, the committee must vote pass, fail, or defer. The warrant (indicating pass or fail) or the deferral form must be returned to the Graduate School within ten working days of the defense or status is automatically assigned a deferral. Specific reasons for the deferral must be communicated in writing to the Graduate School.

In order for the student to pass, a positive vote by a simple majority of the committee is required. No absentee votes are allowed. Students who fail the defense may re-defend once after a waiting period, determined by the committee and communicated to the student in writing. The Graduate School requires that this second defense take place within one calendar year of the date of original defense. A new application for defense and a new warrant are required before this defense can be conducted.

If the committee determines that the student needs more than 10 working days to complete revisions, a deferral form must be marked and communicated to the Graduate School within 10 working days of the defense. The Major Professor must communicate to the Graduate School and the student the specific reasons for the deferral action, and the completion date required by
the committee. The student in deferral status cannot graduate and must register for the next semester if the deferral is not changed to a pass by the Graduate School deadline for submission of the dissertation. If the deferral status is not cleared by the required date of completion (up to a maximum of four months), the deferral lapses to a fail. The entire committee is responsible for verifying that the revisions have been made to their satisfaction. At this point, the committee passes or fails the dissertation and the Major Professor returns the signed warrant to the Graduate School.

After the oral defense, if the student has passed, the Major Professor should obtain the signature of each member of the Doctoral Committee on the Warrant and return the warrant to the Department Chair.

**Graduation Procedure**

To finalize the graduation paperwork, it is required that the grades designated "P" (progress) be changed to a letter grade. These must be cleared from the student's record before the awarding of the Ph.D. can be indicated on the student's record.

There are two deadlines that the student must meet during the semester of graduation. First, the dissertation defense must be held at least two weeks prior to the graduation ceremony date. Second, the dissertation and the signed warrant must be accepted by the Graduate School by the published Graduate School dissertation submission deadline. This deadline is one week prior to the ceremony date. For important dates and deadlines related to graduation, refer to the Graduate School website.

If these deadlines are not met, the student must graduate in the next semester. The student will not be required to register for the next semester if the Doctoral dissertation defense has been held, passed, and the dissertation has been accepted by the Graduate School prior to the first day of classes for the next semester. The date of graduation, though, will be the next semester.

**Registration and Length of Study**

**Interruptions**

If for any reason a student interrupts doctoral coursework (even for one semester), the student should provide a rationale for the interruption to their advisor.

Students who interrupt their work for one or more semesters (excluding summer) must file an application for reentry with the Graduate School. This will require the approval of the Area Chair. Students who have been inactive may be required, as a condition of reentry, to develop an acceptable timetable for progress toward degree completion.

**Minimum Registration**
It is a Graduate School rule that all doctoral students who are at dissertator status (having passed the Preliminary examination) must register for three (3) credits each semester until the doctoral dissertation is filed in the University Library. A special dissertator per credit fee/tuition rate is charged. Enrollment should be in 990 in the department of their Major Advisor.

**Length of Study**

Students have seven years from the date of admission to complete their Ph.D. Appeals exceeding seven years but not more than ten years must be approved by the Department Chair. Appeals exceeding ten years also require the approval of the Dean of the Graduate School.

*Date of last update to this document: August 12, 2011*