

**Procedure Number:** 614a  
**Policy Name:** PhD Comprehensive Examination Procedure  
**Reviewed by:** Nursing Graduate Council  
**Last Review Date:** 02/09/2024

### **Intent to Take PhD Comprehensive Examination**

Students must confer with the permanent faculty advisor regarding their readiness for the PhD comprehensive examination. When the faculty advisor agrees that the student is ready to take the doctoral comprehensive examination, the student will email the PhD Program Director, and copy the faculty advisor, indicating that the student will take the comprehensive examination that semester. This email must be submitted to The PhD Program Director by September 24 (fall semester), February 14 (spring semester) or July 9 (summer semester, if available).

### **PhD Comprehensive Examination Committee Determination**

A committee of three nursing faculty members who are members of the student's dissertation committee will comprise the Examination Committee (the Convener and at least one other member must have full graduate faculty status). If there are not three nursing faculty members on the student's dissertation committee, the PhD Program Director will appoint an additional member(s) within the nursing faculty. One faculty member will be designated, by the PhD Program Director, as the convener of the committee. Faculty may be allowed to observe members of the Examination Committee, for the purposes of orientation to the process. The examination reviews and scores of faculty who are participating in this manner will not be counted in the evaluation of the student's examination

The student may ask the Convener of the Examination Committee questions about the examination process. Faculty (advisor, examining committee members, or any other faculty member) may not provide feedback on any part of the student's work prior to completion of the examination. The examination is to be completed entirely independently by the student.

### **Criteria for Evaluation of the PhD Comprehensive Examination**

Students are expected to demonstrate the following:

- The ability to systematically explore a concept or phenomenon demonstrating nursing discipline knowledge.
- The ability to critically analyze and synthesize literature, supporting the development of a cogent argument and meaningful, defensible conclusions.
- The ability to demonstrate knowledge of scholarly tools in the advancement of new knowledge.
- The ability to communicate a line of inquiry and synthesis of the specific field of interest clearly and logically.

Evaluation criteria include the following:

Demonstrate knowledge on the relationships between epistemology, theory, and research as it relates to the nursing discipline.

Knowledge in area of interest/inquiry

- Synthesize the state of knowledge.

- Identify significant gaps in knowledge.
- Identify how new knowledge would benefit the discipline of nursing.
- Demonstrate application of knowledge with rural or underserved populations.
- Explicate how the area of interest/inquiry relates to patient outcomes.

Methodologic and analytic knowledge (scholarly tools, research methodologies, analytic tools)

- Identify the philosophical underpinnings of the method referenced in written comprehensive examination.
- Identify the strengths and limitations in
  - Design
  - Methods
  - Analysis
- Demonstrate knowledge of both qualitative and quantitative methods.

### **Written PhD Comprehensive Examination**

An electronic copy of the written examination, in MS Word format, is to be submitted to the PhD Program Director by the date indicated in the Comprehensive Examination Deadlines table. The PhD Program Director will distribute the examination to the Examination Committee.

Examination Committee members will meet within ten business days of receiving the paper. If two of the three members indicate the paper is satisfactory, the committee will schedule the student oral examination. The convener will notify the student in writing of the date, time, and location within one week following the meeting. Written feedback on the strengths and weaknesses of the written examination will be provided to the student and will form the basis of areas to be addressed in the oral examination if the written examination is determined to be satisfactory. Upon passing the written doctoral comprehensive examination, the oral doctoral comprehensive examination will be convened.

If a student's written examination is determined to be unsatisfactory, the convener will notify the student in writing along with the Examining Committee's recommendations for improvement. It is recommended that the student make an appointment to meet with the convener to review recommendations. The student may continue course work except for Dissertation credits (NURS999). A second attempt for the examination will be graded by the original Examining Committee whenever possible.

### **Format**

#### **Supplemental Pages**

The PhD comprehensive examination format includes a research NIH format grant proposal. If this format does not logically allow the student to meet all criteria for evaluation, a maximum of 5 additional double-spaced pages, using 12-point Times New Roman font, and one-inch margins, may be included to address the missing content areas. Students are highly encouraged to use these additional pages to demonstrate their comprehensive knowledge of the examination areas. Specific areas to include would be those that were not addressed in the written grant proposal developed to demonstrate how these areas inform the primary examination and fully address examination criteria. References should be consistent with the format used in the text and not included in the 5-page limit.

#### **Grant Proposal**

The research grant proposal is prepared by following the Research (R) Instructions in the [SF424 \(R&R\) Application Guide](#)- for the R01 parent grant. A variety of referencing systems may be preferred for the proposal (i.e. due to page limitations for the R01 application, you may use a referencing system other than APA). Therefore, students are advised to use a software

referencing program (e.g., Zotero) in the preparation of written work for all documents requiring references. This PhD comprehensive exam will later serve as a guide for the student's dissertation proposal.

The Specific Aims and Research Strategy (discussed below) may not exceed 13 pages, including all tables and figures. The proposal must be typed using Times New Roman, 12-point font, single-spaced, and half-inch margins. A budget is not required for the proposal. The components of the research plan are described as follows:

### **Specific Aims- 1 Page Limit**

**Specific Aims Page:** This section concisely and briefly introduces the reader to the problem of interest and sets the context for the substance of the proposed research. The Specific Aims do NOT count toward your Research Strategy, which has a 12-page limit. Concisely state the goals of the proposed research, which are typically stated as specific aims. Summarize the expected outcomes, including the impact of research on the fields involved. Succinctly list the objectives of the proposed research (e.g., to test a hypothesis, create a novel design, solve a specific problem, etc.).

### **Research Strategy- Significance, Innovation and Approach Sections- 12 pages**

**Research Strategy:** 12 pages (for R01s). This section includes the following headings: Significance, Innovation, and Approach.

**A. Significance:** This section of the proposal provides a critical evaluation and synthesis of the literature leading to the proposed research. Please include the following: 1) A literature review that reflects current research from multidisciplinary sources. 2) Gaps in knowledge that the dissertation will address are clearly, logically, and concisely articulated. 3) The importance of the proposed research to health and nursing by relating the specific aims to the broad, long-term objectives. 4) How the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields. 5) How the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

**B. Innovation:** Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation, or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s) that will be tested. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

**Preliminary Studies.** For the PhD student, preliminary studies are not typically needed. However, if the student has previous experience with related research, it should be described here.

**C. Approach:** In this section, please describe the overall research strategy or study design, population and sampling procedures, the study methodology, and analyses to be used to

accomplish the specific aims of the project.

**1) Research Design and Setting.** Describe the study design and setting.

**2) Population, Sample, Sampling Procedures.** Identify the sample composition, how the sample will be obtained, and justify the sample size. Describe the sample in enough detail to determine the feasibility of obtaining a suitable sample size to test the hypotheses, if applicable.

**3) Instruments.** Please describe each instrument along with reliability and validity information. Evidence of the psychometric properties of the proposed instrument(s) should be presented, along with plans for testing in the dissertation.

**4) Data Collection Procedures and any planned Intervention(s)** should be described.

**5) Data Analysis and Interpretation. Restate each hypothesis/or specific aim.** Data analysis should specifically address the testing of each specific aim, hypothesis, or research question. Please include details on how the data will be collected, analyzed, and interpreted as well as any resource-sharing plans as appropriate. Also, discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims. If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

**D. Study Limitations** and potential problems should be described. Alternative approaches and procedures should be described so that specific aims can be achieved, and human subject considerations are met.

**E. Human Subjects, Animal Subjects or Biosafety Concerns.** Please include a paragraph on the protection of research participants (human or animal) including approvals that will be sought, consents or assents that will be obtained, potential risks to the participants, and procedures proposed to reduce the risks. Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised. (<http://www.ehs.columbia.edu/>).

The inclusion of women and members of minority groups appropriate to the scientific aims of the dissertation project should be addressed. A minority group is a subset of the U. S. population that is distinguished by racial, ethnic, or cultural heritage, as defined in the [PHS 398 guidelines](#). Unless a clear and compelling rationale shows that the inclusion of women and minorities is inappropriate to the purpose of the dissertation research, research participants must be recruited from these populations. The composition of the proposed study population with respect to gender and minority status are to be described, and justification for strategies that will be used to recruit and select participants should be provided.

**F. Bibliography/References** (Consistent with the format used in the text. Not included in the 13-page count).

**Human participants.** The student is responsible for adhering to the U. S. Department of Health and Human Services regulations for the protection of human participants (OPRR Reports, 1991). The following points are enumerated and succinctly addressed: a) A description is provided of the proposed involvement of human participants in the dissertation research. The number, age range, and health status of the study population(s) and criteria for inclusion or exclusion in the research are described. In addition, the involvement of vulnerable participants, such as fetuses, pregnant women, children, or institutionalized individuals is justified. b) Potential risks to the

participants from study participation are identified, and for each potential risk, a justified assessment of likelihood of occurrence and seriousness of risk is provided. All potential risks (physical, psychological, social, legal, or other) are included. c) The procedures that will be used to minimize the potential risks listed ~~in~~ above, including risk for loss of confidentiality, are described.

**Vertebrate animals.** The student is responsible for adhering to the U. S. Public Health Service Policy on Humane Care and Use of Laboratory Animals for the protection of animal subjects (National Research Council, 1996).

The following 5 points are enumerated and succinctly addressed:

1. A description of the proposed involvement of animal subjects in the dissertation research is provided. The species, strains, age, sex, and number of animals to be used and criteria for inclusion or exclusion in the research are described.
2. The use of animals, the choice of species, and the numbers proposed for use are justified.
3. The veterinary care that the subjects will receive is discussed.
4. Potential risks from study participation are described, and for each potential risk, a justified assessment of likelihood of occurrence and seriousness of risk is provided. As appropriate, the method of euthanasia to be used is described and justified.
5. The procedures are described that will be used to minimize the potential risks listed above, including the use of analgesics, anesthetics, tranquilizers, and restraining devices to minimize discomfort, distress, pain, and injury.

### **Oral PhD Comprehensive Examination**

The examination committee's written feedback regarding the student's performance on the written portion of the PhD comprehensive examination will provide the basis for the oral comprehensive examination. The oral PhD comprehensive examination will be scheduled within 10 business days following the communicated results of grading of the written portion of the examination. Students may be at a distance for the oral examination, if technology can be used to deliver oral and visual communication with the examining committee.

During the oral PhD comprehensive examination, the student will have no more than 25 minutes to address the areas of weakness identified in the written examination. The Examination Committee will then address questions to the student concerning the areas of evaluation and feedback from the written doctoral comprehensive examination. **Grading**

Immediately following the oral doctoral comprehensive examination, the Examination Committee will meet in an executive session to determine whether the student has passed the examination. The Examination Committee will immediately consider the established criteria for the PhD comprehensive examination and the ability of the student to discuss the criteria in a scholarly manner during the oral PhD comprehensive examination. Two out of the three examiners must concur in order for the student to pass the examination. The student will be notified verbally and in writing of the Examination Committee's decision within 2 business days. The convener will notify the School of Graduate Studies and the PhD Program Director utilizing the Doctoral Comprehensive Examination form that a student has been successful. A written summary report will be prepared by the convener. The written summary report will be provided to the student and a copy placed in the student's file. A copy of this written report will be forwarded to the student's advisor, if the advisor was not a member of the examining committee.

If the student is not successful, the Examination Committee will provide the student with guidelines for improving performance. The convener will note on the PhD Comprehensive Examination form that the student had been unsuccessful with passage of the first PhD comprehensive examination attempt.

A student who does not pass the PhD comprehensive examination may repeat the procedure once, in accordance with the School of Graduate Studies' policy. The student is required to repeat the examination procedure within the next three examination periods.

The student who does not successfully complete the PhD comprehensive examination in two attempts is academically disqualified to continue in the PhD program.

**Comprehensive Examination Deadlines**

(may vary depending upon Academic Calendar for the semester)

	<b>Fall Deadlines</b>	<b>Spring Deadlines</b>	<b>Summer Deadlines</b>
Submission of application	Sept 24	February 14	July 9
Appointment of Exam Committee	October 15	March 6	July 30
Notification to student	October 22	March 13	August 6
Submission of written exam	November 5	March 27	August 20
Grading of written exam	November 19	April 10	September 3
Completion of oral exam	December 6	April 24	September 17

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