



# **Ph.D. Program in Nursing**

## **Handbook for Students (Matriculated Fall 2020 and after)**

**Rutgers, The State University of New Jersey  
School of Graduate Studies  
and  
School of Nursing**

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Congratulations! You are among the select few who have been admitted to a Ph.D. program. You are now embarking on one of the most amazing journeys of your life – the journey to become a nurse scientist! Through research, nurse scientists create evidence-based practices, shape health policy, discover innovative clinical interventions, design high-quality patient-centered healthcare systems, and make a myriad of other incredible scientific contributions that improve the lives and health of persons around the globe.

Since 1989, the Doctor of Philosophy (Ph.D.) program at Rutgers School of Nursing (SON) has prepared scholars for the expression and communication of the knowledge base in the nursing profession. As a Ph.D. graduate, you will develop the science, steward the discipline, and educate the next generation of nurses. Ph.D. prepared nurse scientists are needed to explore perplexing patient problems; test strategies to improve health, manage chronic illness, reduce disability and enhance the quality of life; increase patient safety and care quality; reduce health disparities; lead interdisciplinary teams to improve the health care system and to add to the nursing profession's valuable body of knowledge.

This handbook contains guidelines to inform you of the processes and steps needed to accomplish your goal. Always check this information with the current Graduate School-Newark catalog, your advisor, and later, your dissertation chair; all are a source of current information.

Best wishes on this most exciting and rewarding journey!



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## **GOAL, CURRICULUM, AND PROGRESSION OF STUDENTS ENROLLED IN THE Ph.D. PROGRAM IN NURSING**

### **Program Goal**

In accordance with recommendations from the American Association of Colleges of Nursing, the goal of Rutgers Ph.D. Program in Nursing is to prepare nurse scientists who will expand the knowledge base of nursing, steward the discipline of nursing, lead interdisciplinary research teams, influence health policy, and mentor the next generation of nurses and nurse scientists.

## **Program Outcomes**

The outcomes of this program are to prepare graduates who will:

1. Possess knowledge of the history and philosophy of nursing science.
2. Master in-depth knowledge in a substantive area including the relevant theoretical and empirical literature.
3. Conduct original, ethical, and culturally competent research.
4. Collaborate effectively with other research disciplines and lead interdisciplinary research teams.
5. Disseminate research findings to a wide variety of audiences including practitioners, policymakers, and the scientific community.
6. Mentor future nurse clinicians, educators, and scientists.

## **Expected Competencies of a Rutgers School of Nursing Ph.D. Graduate**

1. Competencies regarding knowledge of the history and philosophy of nursing science:
  - Synthesize the historical and philosophical underpinnings of knowledge development in nursing.
  - Critically analyze philosophical viewpoints and evaluate their potential for developing scientific nursing knowledge.
  - Develop and demonstrate knowledge of ethics and scientific integrity in the conduct of nursing science.
2. Competencies regarding the mastery of in-depth knowledge in a substantive area:
  - Critically analyze concepts relevant to the discipline of nursing and evaluate their potential for theory building and testing.
  - Synthesize theoretical and empirical literature regarding concepts and phenomena relevant to the discipline of nursing.
  - Analyze and evaluate the evolving conceptual bases of a concept/phenomenon of significance to nursing.
  - Build/ adapt one or more models for your research.
3. Competencies regarding the conduct of original, ethical, and culturally competent research:
  - Generate important research questions from a critical review of the literature.
  - Evaluate qualitative methodology and quantitative descriptive and experimental methods in one of the following:
    - Apply a qualitative method in a rigorous manner
    - Apply a quantitative method in a rigorous manner
  - Critique psycho/biometric properties of instruments used to measure bio-psycho-social phenomena.
  - Evaluate and apply advanced statistics.
  - Multivariate techniques.
  - Manage and analyze data.
  - Generate a long-term plan for own program of research by forecasting sequential research questions and outlining the sequence of future studies.
4. Competencies regarding collaborating effectively with other research disciplines and leading interdisciplinary research teams:

- Value contributions of other perspectives and disciplines to the research enterprise and the advancement of knowledge.
  - Demonstrate effective intra- and interdisciplinary communication skills.
  - Collaborate effectively across disciplines through participation in multi-disciplinary team research.
  - Collaborate effectively with interdisciplinary members of their dissertation committee.
  - Manage various viewpoints from dissertation committee members.
5. Competencies related to the dissemination of research findings to a wide variety of audiences including practitioners, policymakers, and the scientific community:
- Effectively communicate research findings and scholarship via a variety of venues including peer-reviewed publications, presentations for clinical, scientific, and interdisciplinary audiences, and the lay public.
  - Identify implications of research findings for the development of evidence-based policy.
  - Synthesize health policy development theories and communication strategies to design a plan aimed at the development of evidence-based policy.
6. Competencies related to the mentorship of future nurse clinicians, educators, and scientists:
- Recognize responsibility for developing the future generation of nurses.
  - Employ a variety of strategies to formally and informally educate students, clinicians, educators, and future nurse scientists.
  - Evaluate the effectiveness of educational/mentorship strategies and outcomes of mentee learning.

### **Curriculum: Post Master's/DNP Option**

The curriculum requires a **minimum of 72 credits**. Nine of these 72 credits are allocated to cognate courses. Three of the 9 cognate credits may be taken within the School of Nursing, and the remaining 6 cognate credits will be taken outside of the School of Nursing. Also included within the 72 credits are 3 credits for the Research Practicum, 3 credits for Dissertation Seminar, and a minimum of 15 credits for the Dissertation Research. A complete listing of required courses and credit allocations are summarized below:

Philosophy of Nursing Science and Knowledge Development	3 credits
Qualitative Research Methods	3 credits

Statistics for Nursing Research I	4 credits
Theory and Application to Nursing Research	3 credits
Statistics for Nursing Research II	4 credits

Fall Semester Year 1	Cr	Spring Semester year 1	Cr	Summer Year 1	Cr
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Quantitative Methods in Nursing Research	3 credits
Measurement of Healthcare Phenomena	3 credits
Evidence-Based Policy Development	3 credits
Role of Nurse Scholar Seminar	3 credits
Professoriate Role Practicum	3 credits
Research Practicum	3 credits
Advanced Quantitative OR Advanced Qualitative Research Seminars	4 credits
Nursing Cognate	3 credits
Cognates in other disciplines	6 credits
Dissertation Seminar	3 credits
Dissertation Research	21 credits

**TOTAL: 72 credits minimum**

Note. For students receiving Nurse Faculty Loan Program (NFLP) funds, one education focused-course, Design of Curriculum, must be taken as a School of Nursing cognate.

**Full and Part-time Study**

Students who meet the admission requirements of the School of Graduate Studies and the School of Nursing and are a good match for the research expertise of faculty at the School of Nursing are admitted as fully matriculated students into the doctoral program and may pursue either full-time or part-time study. The maximum time to complete the program is seven (7) years for full-time students and eight (8) years for part-time students. Students are generally only admitted for a fall semester start.

**3-Year Full-time Sample Plan of Study (Schedule of offerings subject to change).**

**\*Minimum dissertation credits: 24; \*For students receiving NFLP funds, the Design of Curriculum course must be taken as a School of Nursing cognate.**

Philosophy of Nursing Science and Knowledge Development	3	Theory and Application to Nursing Research	3	Measurement of Health Care Phenomena	3
Qualitative Research Methods	3	Quantitative Methods in Nursing Research	3	Cognate	3
Statistics for Nursing Research I	4	Statistics for Nursing Research II	4		
<b>Subtotal Credits</b>	<b>10</b>		<b>10</b>		<b>6</b>
<b>Fall Semester Year 2</b>	<b>Cr</b>	<b>Spring Semester Year 2</b>	<b>Cr</b>	<b>Summer Year 2</b>	<b>Cr</b>
Advanced Quantitative Methods for Nursing Research or Advanced Qualitative Nursing Research Methods	4	Role of the Nurse Scholar <b>Qualifying Exam</b>	3	<b>Begin Dissertation Proposal</b>	
Research Practicum	3	Evidence-Based Policy Development	3	Dissertation Seminar	3
Cognate	3	Role of Professoriate	3	Cognate	3
<b>Subtotal Credits</b>	<b>10</b>	<b>Subtotal Credits</b>	<b>9</b>		<b>6</b>
<b>Fall Semester Year 3</b>		<b>Spring Semester Year 3</b>		<b>Summer Year 3</b>	
Dissertation Research	9	Dissertation Research	9	Dissertation Research	3
<b>DEFEND PROPOSAL</b>				<b>DEFEND DISSERTATION</b>	
<b>Subtotal Credits</b>	<b>9</b>		<b>9</b>		<b>3</b>
<b>Total Minimum Credits</b>					<b>72</b>

**4-Year Part-time Sample Plan of Study (Schedule of offerings subject to change).**

**\*Minimum dissertation credits: 24; \*For students receiving NFLP funds, the Design of Curriculum course must be taken as a School of Nursing cognate.**

Fall Semester Year 1	Cr	Spring Semester year 1	Cr	Summer Year 1	Cr
Philosophy of Nursing Science and Knowledge Development	3	Theory and Application to Nursing Research	3	Cognate	3
Statistics for Nursing Research I	4	Statistics for Nursing Research II	4		
<b>Subtotal Credits</b>	<b>7</b>		<b>7</b>		<b>3</b>
Fall Semester Year 2	Cr	Spring Semester Year 2	Cr	Summer Year 2	Cr
Qualitative Nursing Research Methods	3	Quantitative Methods in Nursing Research	3	Measurement of Health Care Phenomena	3
Role of the Professoriate	3	Cognate	3	Cognate	3
<b>Subtotal Credits</b>	<b>6</b>	<b>Subtotal Credits</b>	<b>6</b>		<b>6</b>
Fall Semester Year 3		Spring Semester Year 3		Summer Year 3	
Advanced Quantitative <b>OR</b> Advanced Qualitative Research	4	Role of the Nurse Scholar	3	Dissertation Seminar	3
		<b>QUALIFYING EXAM A</b>			
Research Practicum	3	Evidence-Based Policy Development	3		
<b>Subtotal Credits</b>	<b>7</b>		<b>6</b>		<b>3</b>
Fall Semester Year 4		Spring Semester Year 4		Summer Year 4	
Dissertation Research	7	Dissertation Research	7	Dissertation Research	7
<b>DEFEND PROPOSAL</b>					
<b>Subtotal Credits</b>	<b>7</b>		<b>7</b>		<b>7</b>
<b>TOTAL PROGRAM CREDITS</b>					<b>72</b>

### **Post Baccalaureate to Ph.D. Option**

The BS to Ph.D. program provides a viable accelerated pathway to the Ph.D. for baccalaureate-prepared nurses. The 99-102 credit program includes an accelerated 30-33 credit master's degree option, focusing on Nursing Leadership.

1. The 30 credit accelerated master's degree, presented in a hybrid format, will be completed in Year 1 of the program. The master's track will include clinical practicum experiences, and these experiences will be developed in consultation with the Specialty Director for the Leadership Program.
2. If a student decides not to continue with the Ph.D., he/she will need to complete the remaining number of credits if a traditional master's degree in Nursing Leadership is desired.
3. Various financial aid options will be explored for incoming students, such as funding through the Nurse Faculty Loan Program and Teaching Fellowships, if available.
4. Given the rigorous nature of this program, full-time study is strongly recommended.

**Post Baccalaureate Ph.D. Program Curriculum (Schedule of course offerings subject to change). For students receiving NFLP funds, Design of Curriculum must be taken as a cognate.**

				<b>Summer preceding start</b>	
				NURS 660 Clinical Inquiry into evidence-based practice	3
<b>Fall Semester Year 1</b>	<b>Cr</b>	<b>Spring Semester Year 1</b>	<b>Cr</b>	<b>Summer Semester Year 1</b>	<b>Cr</b>
Quality & Safety in Healthcare Theory	3	Organizational Complexity Theory	3	Social Determinants	3
				Master's level statistics course- (Pre-req)	
Quality & Safety in Healthcare Practicum	3	Organizational Complexity Practicum	3		
Leadership Across the Continuum Theory	3	Managing Human Capital	3		
Leadership Across the Continuum Practicum	3	Healthcare Economics & Business Practices	3		
<b>Subtotal Credits</b>	<b>12</b>		<b>12</b>		<b>3</b>
<b>Fall Semester Year 2</b>	<b>Cr</b>	<b>Spring Semester Year 2</b>	<b>Cr</b>	<b>Summer Semester Year 2</b>	<b>Cr</b>
Philosophy of Nursing Science and Knowledge Development	3	Theory and Application to Nursing Research	3	Measurement of Health Care Phenomena	3
Qualitative Research Methods	3	Quantitative Methods in Nursing Research	3	Cognate	3
Statistics for Nursing Research I	4	Statistics for Nursing Research II	4		
<b>Subtotal Credits</b>	<b>10</b>		<b>10</b>		<b>6</b>
<b>Fall Semester Year 3</b>	<b>Cr</b>	<b>Spring Semester Year 3</b>	<b>Cr</b>	<b>Summer Semester Year 3</b>	<b>Cr</b>
Advanced Quantitative Methods for Nursing Research or Advanced Qualitative Nursing Research Methods	4	Role of the Nurse Scholar	3	Dissertation Seminar	3
Research Practicum	3	Evidence-Based Policy Development	3	Cognate	3
Cognate	3	Role of Professoriate	3		
		<b>QUALIFYING EXAM</b>		<b>BEGIN DISSERTATION PROPOSAL</b>	
<b>Subtotal Credits</b>	<b>10</b>	<b>Subtotal Credits</b>	<b>9</b>		<b>6</b>
<b>Fall Semester Year 4</b>	<b>Cr</b>	<b>Spring Semester Year 4</b>	<b>Cr</b>	<b>Summer Semester Year 4</b>	<b>Cr</b>
Dissertation Research	9	Dissertation Research	9	Dissertation Research	3
<b>DEFEND PROPOSAL</b>				<b>DEFEND DISSERTATION</b>	
<b>Subtotal Credits</b>	<b>9</b>		<b>9</b>		<b>3</b>
<b>Total credits by semester</b>	<b>41</b>		<b>40</b>		<b>18</b>
<b>Total Minimum Credits</b>					<b>102</b>

## **Student Advisement**

### **Academic Advisor**

Upon admission, each student is assigned an academic faculty advisor whose program of research or methodological expertise is a good match for the student's interests. While the academic advisor should become the research advisor (i.e., dissertation chair), it is not a requirement. If the academic advisor does not become the research advisor, the academic advisor will serve as the student's primary academic advisor until the time when a research advisor (dissertation chairperson) is selected. The academic advisor provides the student with the following guidance:

- Refinement of research interest/focus
- Sequencing and selection of courses consistent with the plan of study
- Approving cognates that inform the student's dissertation research
- Approve any advisee's grant applications before submission
- Supervising the student's timely progression through the program
- Preliminary development of research question(s) and selection of method and theoretical rationale
- Selecting members of the Research Advisory and Qualifying Examination Committees
- Selecting a mentor for the Research Practicum
- Selecting a mentor for the Professoriate (Teaching) Practicum

Should it be necessary to make a change in the academic advisor, the change can be initiated by the advisor or advisee but must be coordinated with the Administrative Coordinator, Office of Nursing Science.

Although the Academic Advisor frequently becomes the Dissertation Chairperson, this is not always the case depending upon the student and faculty member's preferences. The Dissertation Chairperson is selected and finalized no later than upon the student's satisfactory completion of the Qualifying Examination Part A.

### **Cognates**

The terms cognate and cognate courses refer to courses that enrich the substantive basis for the dissertation and beginning program of research. Finding the right mix of courses requires a partnership between the student and the advisor. Frequently the nine hours allocated to cognate courses are inadequate and the student will choose to take more courses and increase his/her total credit hours beyond the minimum requirement. All cognate courses must be approved by the student's advisor or dissertation chairperson.

### **Research Advisory Committee**

SGS Ph.D. students are required to form a Research Advisory Committee during the second year. This Committee is intended to provide advice and guidance to the student about his or her research interest and dissertation focus. The Committee will consist of the Academic Advisor and at least two additional School of Nursing faculty members to be chosen by the student in consultation with the Academic Advisor. A Chair of the committee should be appointed by the Committee and can be the Academic Advisor or any other member. The Research Advisory Committee can be, but is not necessarily, the same as the Qualifying Examination Part A Committee or the Dissertation Committee.

Students are required to meet annually with their Research Advisory Committee, beginning in the fall semester of the second year. The annual Research Advisory Committee meeting is mandatory and the responsibility of the student to initiate. Should a member of the Committee be unavailable, the Chair of the committee should appoint either a temporary or permanent replacement. No student will be allowed to register without documentation of having held their annual Advisory Research Committee meeting within the past 12 month period.

The intended format of the Research Advisory Committee meeting is for the student to discuss (i) proposed work for the next one-year period; (ii) focus of the Qualifying Examination Part A written paper; (iii) an overview of his/her progress towards the dissertation focus/project; and (iv) progress since the last Research Advisory Committee meeting. A written evaluation of the student's progress and prospects is to be written by the Chair of the Committee on the Annual Research Advisory Committee form immediately following each meeting ([https://grad.rutgers.edu/sites/default/files/2021-03/QualifyingExamA.2020pdf\\_000.pdf](https://grad.rutgers.edu/sites/default/files/2021-03/QualifyingExamA.2020pdf_000.pdf)) and distributed to the student, committee members, the Ph.D. Program Director and the School of Graduate Studies (SGS) office with all required signatures.

### **Research Practicum Experience**

Each student is required to engage in a 3-credit intensive research experience of at least one semester in length. The purpose of this experience is to allow the student to participate in phases of the research process under the tutelage of an experienced research faculty mentor. This experience precedes the student's independent dissertation research. ("Mentor" will refer to the research faculty mentor for the practicum project; "advisor" refers to the Rutgers SON Ph.D. advisor. In many instances, this would be the same person).

The student works closely with a mentor who is a Ph.D.-prepared faculty member (or non-faculty researcher with comparable credentials, e.g. NIH Intramural Researcher) who is conducting a program of research related substantively and/or methodologically to the student's anticipated dissertation topic. The student may work with his/her advisor or another faculty member in the SON, or the student may carry out the research experience in another setting in which state-of-the-science research is being conducted.

In this experience, the student is expected to actively participate in various aspects of the research process with the faculty mentor. Examples of practicum activities may include active engagement as a member of the mentor's research team, mentored experience in the analysis of an existing dataset, or an instrument development project. The student should dedicate at least four hours per week for a minimum of 15 weeks to this experience. Thus, a minimum of 60 hours of research practicum experience is required. Specific activities and products are planned under the guidance of the advisor in collaboration with the mentor and depend on the nature and stage of the research project. By the end of the research practicum, **students are expected to have produced a draft manuscript for publication as either the first author or a co-author.**

The plan must be approved in advance by the student's advisor. A written research practicum plan, signed by the student, advisor, and mentor, specifies the objectives to be attained, experiences and activities for which the student is responsible, the time commitment (at least 60 hours of work), and the deliverable product(s). Upon completion of the experience, the advisor –

with input from the mentor – determines the extent to which the objectives have been met satisfactorily and assigns a grade of either Pass or Fail. Documents related to the practicum plan are submitted with the registration form to the Administrative Coordinator in the Office of Nursing Science.

### **Program Milestones**

During the program, the student must:

1. Adopt the 3-year or 4-year plan of study as outlined in this Handbook. Any major revisions to an individual student's plan of study that is approved by the advisor must be given to the Ph.D. Program Director for approval.
2. Pass a qualifying examination for admission to doctoral candidacy.
3. Develop a dissertation proposal.
4. Secure committee approval of the dissertation proposal.
5. Obtain IRB approval of the protocol and conduct and successfully defend the dissertation research, which must be independent and original work.

### **Manuscripts and Research Grant Proposals**

The Ph.D. program of Rutgers SON encourages our Ph.D. students to prepare and submit manuscripts as well as research grant proposals while pursuing their degree. Please bear in mind, however, the following ethical guidelines:

- Never include a co-author on a manuscript without their knowledge and permission. All co-authors should have contributed essential ideas or data for the manuscript; participated in writing or revising drafts; and participated in the final approval of the version to be published.
- It is strongly suggested that the student's advisor or designee review the manuscript before submission for publication.
- Ph.D. students should **not** submit a research grant proposal associated with their dissertation research or other activities as a student without the review and approval of the student's Academic Advisor and/or dissertation committee.

### **Important Academic Policies**

For students admitted in the fall 2020 semester and thereafter, the Ph.D. in Nursing Program is governed by policies issued by the SON and the School of Graduate Studies (SGS). Therefore, students should familiarize themselves with the academic policies of the School of Graduate Studies that are delineated on the SGS website and the SON PhD Handbook by visiting the following websites:

- <https://grad.rutgers.edu/current-students/policies-procedures-students>
- <https://nursing.rutgers.edu/students/catalog/>

The following are particularly relevant to Ph.D. students:

- **Transfer Credit:** <https://grad.rutgers.edu/current-students/policies-procedures-students>
  - A student can request up to 24 credits from another institution for transfer after completing 9 credits at SON/Rutgers with a grade of B or better.
  - Can only transfer credits for graduate-level courses for which a B or better was received
  - Transfer courses should have been taken within the past 6 years
  - Can only transfer courses that are equivalent to Ph.D. in Nursing core courses or a

- cognate approved by the faculty advisor.
  - Research and independent study credits are not accepted as transfer credits.
  - No more than 40% of the required minimum number of course credits for the Ph.D. in Nursing degree can be accepted as transfer credits.
  - In applying for a transfer of credit, the student must obtain a transcript of the course to be transferred and complete a transfer of credit form ([https://grad.rutgers.edu/sites/default/files/2021-02/transfer\\_credit\\_application\\_022707.pdf](https://grad.rutgers.edu/sites/default/files/2021-02/transfer_credit_application_022707.pdf)). All transfer credits must be approved by the Ph.D. Program Director and the Graduate Dean. This form must be submitted to the Ph.D. program director for approval. The Director then submits the transcript and transfer of credit form for review and final authorization by the Graduate Dean. When the transfer is approved, the Registrar's office records the transfer of credits on the student's transcript.
- **Continuous registration requirement, restoration, and readmission:** All students are expected to maintain continuous registration while enrolled in SGS. Students who fail to maintain continuous registration are at risk of formal dismissal. Doctoral students who have been admitted to candidacy and who do not maintain continuous registration may apply for “**restoration of active status**” (see form at <https://grad.rutgers.edu/sites/default/files/2021-01/2020%20active-status-restoration-application%202020.pdf>). This application must be approved by the program director and accompanied by a fee of one credit in-state tuition for a maximum of 5 semesters (payable to SGS). All students who have not maintained continuous registration (including doctoral students who have been admitted to candidacy) must apply for **readmission** (see form at [https://grad.rutgers.edu/sites/default/files/2021-01/readmission-application-2020\\_0.pdf](https://grad.rutgers.edu/sites/default/files/2021-01/readmission-application-2020_0.pdf)) to the School of Graduate Studies before filing for degrees.
- **Matriculation Continued:** Under some circumstances, students may register for “matriculation continued”. Matriculation continued is a zero-credit offering that allows students to remain enrolled while not registered for either courses or research credits. Matriculation continued is not available to students who have completed the qualifying exam (admission to candidacy). A maximum of two semesters of matriculation continued is allowed. International students on visas are responsible for verifying the effect of registration for matriculation continued on their visa status.
- **Leave of Absence: See Policy at <https://grad.rutgers.edu/current-students/policies-procedures-students>:**

Unexpected life events may cause a student to interrupt their studies. In this event, the student should contact the SON's Student Services and the Ph.D. Program Director. Leave of absence (LOA) from studies is available for students who have to temporarily suspend or interrupt studies and plan to re-enroll after the Ph.D. program interruption. Students may request a leave of absence for a period of time not to exceed a total of 12 months, Written notification of the student's intent to return must be submitted to the PhD program director in the SON at least one month prior to the expiration of the LOA.

  - Meet with the Ph.D. program director to determine if an LOA is appropriate.
  - Complete, sign, and submit the Leave of Absence form

<https://grad.rutgers.edu/sites/default/files/2021-02/Requestforleaveofabsence.pdf>

and submit it to the Ph.D. program director for approval.

- The approved form will be submitted to the SGS Senior Associate Dean for approval.

International students who wish to temporarily leave the United States under this policy must obtain permission of their advisor, graduate program director, and the SGS 30 days prior to their travel, and should contact the Rutgers Global International Student and Scholar Services (ISSS) office to receive advice and most current information regarding their legal status. Taking a leave of absence from the program requires appropriate student's SEVIS record and the ISSS office will direct students to the process appropriate in their situation. Students granted permission then apply for a new I-20 or DS-2019 to return to the U.S. in a future semester as approved by their program and SGS. Any international student who leaves the United States under this policy without the consent of their Graduate Director is subject to disciplinary action.

Students NOT returning from a leave of absence within the approved date may be required to reapply to the Graduate School and undergo a new admissions process.

- **Scholastic Standing:** Graduate students, including Ph.D. in Nursing students, are expected to earn grades of B or higher in their coursework. No more than 2 courses (6 credits) with a grade of C or C+ can be used in meeting the degree requirements. Students must also maintain a minimum cumulative average of B or better during each semester of study to stay enrolled.
- **A grade of F in a course will result in academic dismissal from the Ph.D. in Nursing Program.**
- **Grade of Incomplete:** If a student needs to drop a course(s) for valid reasons (e.g., medical conditions or employment changes) after a substantial amount of the semester has gone by, another option to consider would be to arrange with the instructor to receive a grade of Incomplete (IN). Incompletes are expected to be made up within one year. Longer intervals may be requested pending approval by the instructor, graduate director, and SGS. This waiver should be sought before the one-year expiration date. It will not be routinely granted. Students who have more than one Incomplete will be allowed one semester to reduce the number to one (or none), after which they will not be allowed to register for additional courses until these are completed or abandoned. Abandoned refers to a situation in which students have agreed that the course may no longer be completed and the program has agreed to allow them to continue with *Permanent Incompletes (PIN)* on their records. Responsibility for the monitoring of this process resides with the graduate programs.
- **PhD Program Extension of Time:** Students are expected to complete the PhD program in the 7<sup>th</sup> (full-time students) or 8<sup>th</sup> (part-time students) year beginning with the first enrollment in the program. First enrollment is defined by the start of accumulation of credits towards the PhD degree. Semesters of approved leaves of absences and matriculation continued do not count toward accumulated time. Students who have not completed the program in the

expected time will be reminded that they will need to complete a formal Extension of Time (EOT) request to remain in good standing and be allowed to register for courses. It is the student's responsibility to initiate the EOT request and complete the EOT form

[https://grad.rutgers.edu/sites/default/files/2021-03/EOT\\_June13\\_2019.pdf](https://grad.rutgers.edu/sites/default/files/2021-03/EOT_June13_2019.pdf).

CRITERIA FOR GRANTING EOT REQUESTS: The deans of the School of Graduate Studies will look for convincing evidence that: (a) the student, the faculty mentors, and the program have agreed on a realistic plan and timetable for degree completion, (b) the supporting infrastructure is available within the program so that the plan may be completed, and (c) any obstacles to degree completion have been or are being addressed. Evidence of a realistic plan may include a written proposal for the dissertation that has been approved by the thesis committee. In some cases, SGS may ask for additional information from the student or the program. Requests for EOTs from students who are entering year 8 or later, who have received repeated EOTs, will be given very close scrutiny. SGS is aware that the program faculty and the individual student share responsibility for creating an environment where the student can accomplish the goals stated in the plan for completion of the degree. SGS deans may also initiate discussions with programs for the purpose of evaluating the requirements, mentoring practices, and admission processes should it be the case that a large proportion of students are requiring EOTs.

DENIAL OF EOT: In the event the program director decides not to approve the EOT, the program may request to SGS that the enrollment be terminated. In the event that the deans of the School of Graduate Studies decide not to approve the extension, enrollment may be terminated.

- University NetID and email policies <https://it.rutgers.edu/policies/>  
Per Rutgers University policy, all university business (including communications between students and faculty/staff) must be created, stored, processed, and transmitted using official Rutgers email accounts that are HIPAA compliant. All emails between students, faculty, and staff must be transmitted via official SON Rutgers University email addresses ([netid@sn.rutgers.edu](mailto:netid@sn.rutgers.edu)) using Rutgers Connect ([connect.rutgers.edu](https://connect.rutgers.edu)). Faculty and staff will communicate with students using the students' Rutgers Connect email accounts. It is the student's responsibility to check his/her Rutgers email account regularly so that important communications from faculty and/or staff are not missed. Also, it is the student's responsibility to update any change of address and contact information in the Office of Nursing Science. The student must notify the Administrative Coordinator, Office of Nursing Science, of their new address and contact information.
- Students should also be familiar with the SON Standards of Conduct found on our website: <http://nursing.rutgers.edu/conduct/index.html>, and the University Code of Student Conduct at <https://grad.rutgers.edu/sites/default/files/2021-07/10-2-11-current%20%281%29.pdf>. These policies govern activities such as the use of cell phones and other electronic devices during class, attendance, civility, and other important topics.
- The University's policies on Academic Integrity can be found at <http://academicintegrity.rutgers.edu/>

- The University's policies prohibiting sexual harassment, gender discrimination, and related misconduct can be found at <https://sexualharassment.rutgers.edu/university-policy-prohibiting-sexual-harassment>
- For information regarding reasonable accommodations for students with disabilities go to <https://ods.rutgers.edu/>
- Diversity, Equity, Inclusion  
Rutgers School of Nursing is committed to diversity and inclusion and dedicated to maintaining an anti-racist and anti-bias organization. To that end, the School of Nursing leadership openly invites members of the community to discuss concerns without fear of retribution. When they do occur, racist and bias incidences can be difficult to report and/or some may prefer anonymous means. As such, any School of Nursing community member can anonymously submit concerns through the Racism and Bias Reporting Electronic Hotline that can be found here: <https://nursing.rutgers.edu/anti-racism-bias-hotline/>  
Completion of the form requires no personal identifying information, nor will an IP address be tracked. Submissions will be sent directly to the School of Nursing Dean, Dr. Linda Flynn. It is our sincere hope that through open dialogue and understanding, we can continue to grow in tolerance and understanding of one another and the many valuable differences that make us a strong community.

## QUALIFYING EXAMINATION FOR ADMISSION TO CANDIDACY

### Statement of Purpose

The purpose of the Qualifying Examination is to determine whether a student has acquired sufficient mastery of core course content and his or her field of concentration to warrant admission for candidacy for the Ph.D. degree.

The Qualifying Examination is comprised of two parts: Qualifying Exam Part A and Propositional Qualifying Exam Part B. The Qualifying Examination Part A is comprised of a written paper and an oral exam. Propositional Qualifying Exam Part B assesses the student's ability to prepare and defend a research proposal.

### Qualifying Exam Part A

The Qualifying Examination Part A is comprised of written and oral components. Qualifying Exam Part A is focused on a phenomenon/concept of interest that is to be the core of the student's dissertation research and will address an important area of nursing science. The written and oral components of the Qualifying Examination Part A are designed, primarily, to evaluate the students' comprehensive knowledge regarding this core phenomenon, their ability to articulate and synthesize that knowledge, to articulate the gaps in the science, and to describe the implications for their future directions.

This written component of the exam is a scholarly paper that pertains to a core phenomenon of interest to the student's dissertation research, nursing and healthcare, and nursing science. The paper provides 1) a description of a core phenomenon of interest and relevant issues/problems associated with the phenomenon; 2) a critical examination of two to three relevant theories that are useful in describing and examining the core phenomenon of interest; 3) a critical synthesis and analysis of relevant studies guided by the theories of interest; 4) a description of the empirical, theoretical, and knowledge gaps that pertain to the phenomenon of interest; and 5) a description of how the theories can be synthesized and integrated to inform future research related to the student's topic of interest. The Qualifying Examination written paper should be no more than 20-25 pages in length (exclusive of references and title page) written in 12-point font, be double-spaced, and adhere strictly to APA style formatting. In preparing the paper, students are expected to strictly adhere to the Rutgers University Academic Integrity Policy: <http://studentconduct.rutgers.edu/academic-integrity/>.

The **oral component** of the exam is designed, primarily, to evaluate the student's knowledge regarding this core phenomenon, his or her ability to verbally 1) articulate and synthesize that knowledge, 2) articulate the gaps in the science, and 3) describe the implications for its future directions. The oral component of the examination consists of questions from the Committee about any aspect of the written paper and other relevant core content within the Ph.D. program curriculum.

### Requirements

The exam must be taken after the student has completed the following core curriculum courses with an academic average of 3.0 or better: Philosophy of Nursing Science and Knowledge

Development, Qualitative Research Methods, Theory and Application to Nursing Research, Statistics for Nursing Research I and II, Quantitative Methods in Nursing Research, Measurement of Health Care Phenomena, and Advanced Quantitative or Advance Qualitative Methods. The exam cannot be taken if there is an incomplete in any course.

The student will formally complete the written and oral components of the Qualifying Examination during the Spring semester following completion of either the Advanced Qualitative or Advanced Quantitative course. The final version of the Qualifying Examination paper must be formally submitted to the Qualifying Examination committee no later than four weeks before the last day of the Spring semester final exam period, as indicated by the Rutgers University Academic Calendar. The oral examination must also take place during the same Spring semester and occur no later than the last day of the final exam period, as indicated by the University Academic Calendar.

### **Procedures**

1. The Qualifying Examination Committee consists of three to four members: At least two of the members must be Members or Associate Members of the SGS graduate faculty, including the Chairperson. A member may also be selected outside of the program faculty. If the outside member does not hold a doctoral degree, a copy of the CV must be submitted to SGS for approval. If the director of the graduate program is a member of the committee, then another member of the graduate faculty will be responsible for approving the thesis in place of the Graduate Director; the Graduate Director's signature can only be counted once even if they hold two roles (Graduate Director and committee chair).
2. Before the commencement of the written component of the Qualifying Exam, the student will meet with the Qualifying Examination Committee members and its Chairperson. During the meeting, the Qualifying Exam Committee will guide the student in his or her preparation for the written exam. The committee will designate the committee member who may review and comment on no more than **one complete draft** of the written examination. No other person may read the written paper before the formal submission of the final written examination to all members of the Qualifying Examination Committee.
3. Before the commencement of the written examination, the student will ensure that the Qualifying Examination Committee Form is signed by the Chair of the Qualifying Examination Committee. The student will submit the form to the Administrative Coordinator in the Office of the Division of Nursing Science. The Qualifying Examination Committee Chairperson is responsible for scheduling the meeting between the student and Qualifying Examination Committee to discuss the written paper focus/topic, 2) determining the date for submission of the written examination to the Committee members, and 3) coordinating the grading process and submission of exam grades to the Administrative Coordinator for the Office of the Division of Nursing Science.
4. All members of the Qualifying Examination Committee evaluate the written and oral components of the examination. The grading system for the exam is Pass/Fail, and a minimum of two out of three members must render a Passing grade for the student to pass each component of the exam.

5. The written exam is read and graded independently by all members of the Qualifying Examination Committee, using the grading rubric for the written exam. The student must receive a grade of “Pass” (score 79.5 or above) on the paper by the majority (i.e., two out of three members or three out of four members) of the Qualifying Examination Committee to pass the written exam and progress to the oral component of the examination. If the Committee renders a grade of “Fail” for the paper, he/she will receive written feedback from the Committee. The student has one opportunity to formally resubmit the paper for grading. The resubmitted Qualifying Examination paper must be received by the Qualifying Examination Committee members within the first month of the following semester, which in most cases (ex. Spring examination) will be the following Fall semester. In the event of two failures on the written paper, the student does not move on to the oral exam and is dismissed from the Ph.D. in Nursing program.
6. After successfully completing the written examination, the student should finalize the date and time for the oral examination with Qualifying Examination Committee members. Once finalized, the student will contact the Administrative Coordinator for the Office of the Division of Nursing Science to schedule the oral examination. The student should notify the Qualifying Examination Committee members of the oral exam location.
7. To successfully pass the oral component of the examination, a majority of the Committee members (e.g. 2 of 3) must agree on the grade of “Pass”. If the student receives a grade of “Fail”, he/she has one more opportunity to retake the oral component of the examination. The oral examination retake must occur within the first month of the following semester, which in most cases (ex. Spring examination) will be the following Fall semester. In the event of two failures on the oral component of the Qualifying Examination, the student will be dismissed from the Ph.D. in Nursing program.
8. At the conclusion of the oral examination, the student will be asked to leave the room so that the committee can discuss and deliberate. The Chair of the Committee will lead this discussion and determine if there is a consensus for a Pass or Fail. The student will be asked to return to the room and, with all Committee members present, the Chair of the Committee will inform the student of the Committee’s determination and any further instructions as needed.
9. Upon the student’s successful completion of the Qualifying Exam Part A, the student is responsible to ensure that the Examination Grade Form is completed ([https://grad.rutgers.edu/sites/default/files/2021-03/QualifyingExamA.2020pdf\\_000.pdf](https://grad.rutgers.edu/sites/default/files/2021-03/QualifyingExamA.2020pdf_000.pdf)), signed by their Committee members, and submitted to the Administrative Coordinator for the Office of the Division of Nursing Science.

**Written Qualifying Exam Rubric:** This written exam is a scholarly paper that pertains to a phenomenon of interest in the student’s dissertation research and nursing science. The paper provides a description of a core phenomenon of interest and relevant problems/issues associated with this phenomenon. It provides a critical examination of relevant theories used to examine and explain the core phenomenon of interest. Also, the paper should provide a synthesis and analysis of relevant studies guided by the theories of interest, a description of how the theories are useful in understanding the phenomenon of interest. The paper should also present articulation of the empirical, theoretical, and knowledge gaps, and how the theories can be integrated to inform future research directions related to the phenomenon of interest.

Criterion	5 Points	4 Points	3 Points	2 Points	0 Points
The core phenomenon of interest and relevant problems/issues associated with the phenomenon are described. Its relevance to nursing, healthcare, and nursing science is summarized.	The core phenomenon is clearly and fully introduced and defined, and its relevance to nursing, healthcare, and nursing science is clearly summarized.	The concept/phenomenon is clearly and fully introduced and defined, but the discussion about its relevance to nursing, healthcare, and nursing science is weak.	The introduction and definition of the concept/phenomenon are weak, but the discussion about its relevance to nursing, healthcare, and nursing science is clearly summarized.	The concept/phenomenon is superficially introduced and defined and its relevance to nursing, healthcare, and nursing science is weak.	Not addressed
	25 Points	20 Points	15 Points	10 Points	0 Points
Pertinent theories that describe and/or explain the phenomenon of interest are examined and presented. How each theory specifically describes and explains the phenomenon is presented	Pertinent theories are examined and presented. Clear theoretical definitions of theory concepts are presented. Fully presents how each theory describes/explains the student’s concept of interest.	Concepts in each theory are identified and theoretical definitions for concepts are provided. The relevance of the theory to the student’s concept of interest is weak.	Concepts in each theory are identified but theory concepts are weakly defined or not provided.	Concepts in each theory are minimally identified and defined, and the relevance of the concept to the student’s concept of interest is weak.	Not addressed.
	25 Points	20 Points	15 Points	10 Points	0 Points
The relevant theory relational propositions or assertions (directional and/or non-directional) from each theory are presented.	Relevant relational propositions from each theory are clearly explained. Directional propositions are clearly specified.	Relevant relational propositions from each theory are clearly explained. The specification of directional propositions is weak or unclear.	A discussion of relevant propositions is vague or incomplete. The specification of directional propositions is incomplete or poorly explained.	A discussion of relevant propositions is vague or incomplete. Directional propositions are not identified/explained.	Not addressed.
	25 Points	20 Points	15 Points	10 Points	0 Points
Describes how the theories were used in other studies, including synthesis and analysis of relevant findings and propositions that were tested. Describes how the theories are	Clearly describes how the theories were used to guide quantitative and qualitative studies, as appropriate. Presents a clear analysis/synthesis of relevant findings related to propositions	Presents quantitative and qualitative studies as appropriate. However, synthesis/analysis of relevant findings as they relate to theory propositions tested is partial or only partially describes how the theories are	Presents some studies that are relevant to the theories but the literature review is weak and does not present the state of the science. Description of how the theories are useful in understanding the	Studies are presented that did not apply or test the theories as previously specified. Description of how the theories are useful in understanding the phenomenon of interest is weak or absent. A table of	Not addressed. The table of evidence is absent or severely lacks depth.

useful in understanding the phenomenon of interest.	tested. Fully describes how the theories are useful in understanding the phenomenon of interest. A table of evidence is presented.	useful in understanding the phenomenon of interest. A table of evidence is presented.	phenomenon of interest is weak. A table of evidence is presented but lacking in depth.	evidence is presented but lacks depth.	
	<b>15 Points</b>	<b>13 Points</b>	<b>8 Points</b>	<b>4 Points</b>	<b>0 Points</b>
Describes the empirical, theoretical, and knowledge gaps related to the phenomenon of interest. Describes how the theories can be integrated to inform future research related to the phenomenon of interest.	Fully describes the empirical, theoretical, and knowledge gaps related to the phenomenon of interest. Fully describes how appropriately selected non-relational and relational propositions from the theories can be linked to form an integrated theoretical approach to inform future research related to the phenomenon of interest.	Fully describes gaps related to the phenomenon of interest. Describes how non-relational and relational propositions from the theory can be linked but a description of the application of the integrated theory to future research related to the phenomenon of interest is not clear or weak.	The description of empirical, theoretical, and knowledge gaps as they pertain to the phenomenon of interest is not clear or weak. Fully describes how the theories can be integrated but does not apply them to future research related to the phenomenon of interest.	The description of empirical, theoretical, and knowledge gaps is weak, and the description of how the theories can be integrated and applied to future research related to the phenomenon of interest is weak.	Not addressed.
	<b>5 Points</b>	<b>4 Points</b>	<b>3 Points</b>	<b>2 Points</b>	<b>0 Points</b>
The writing style reflects clarity, precision, logical flow, correct grammar, and APA formatting, and is free of spelling errors.	Strict adherence to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar and no spelling errors.	Mostly adheres to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar and no spelling errors.	Mostly adheres to APA format; the writing style is mostly clear, concise, and logical. Consistent use of correct grammar and no spelling errors.	One of the following noted: 1) inconsistent adherence to APA format; 2) writing style lacks clarity, precision, and/or logic; 3) Incorrect use of grammar and/or multiple spelling errors.	All of the following are noted: 1) Poor adherence to APA format; 2) writing style lacks clarity, precision, and/or logic; 3) incorrect use of grammar and/or multiple spelling errors.

### **Propositional Qualifying Examination Part B**

The Propositional Qualifying Exam Part B assesses the student's ability to prepare the written dissertation research proposal and to conduct its oral defense. This aspect of the Qualifying exam must be taken within one year of completion of Qualifying Examination Part A.

1. The student's Dissertation Committee will serve as the Propositional Qualifying Examination Committee. A successful examination requires the signature of all members of the student's dissertation committee.
2. A Propositional Qualifying Examination Part B Report/Admission to Candidacy Form

(<https://grad.rutgers.edu/sites/default/files/2021-04/SGS%20Biomedical%20qualifying%20exam%20application%20B%202021.pdf>), signed by each member of the Propositional Examination Committee must be signed by committee members and sent to the Senior Associate Dean, School of Graduate Studies, within two weeks of the exam.

3. Upon notification of successful completion of Qualifying Examination Part B, the student will be notified by the Senior Associate Dean that he/she is admitted to candidacy for the Ph.D. degree.

## DOCTORAL DISSERTATION

### Overview

Each Ph.D. student shall pursue, under faculty direction, an original investigation of a problem of significance to nursing and present the results of this investigation in a dissertation. The dissertation must be approved by a faculty committee of at least four members selected by the student and approved by the Director of Ph.D. Program in Nursing.

All students must abide by Rutgers University Institutional Review Board policies and the guidance/direction of the Dissertation Committee chairperson and committee members during the entire dissertation process. Links to important IRB regulations, policy, and procedures that students must read, understand, and comply with listed below:

Policies and Regulations <https://orra.rutgers.edu/hspp-policies>

HSPP Toolkit <https://research.rutgers.edu/researcher-support/research-compliance/human-subjects-protection-program-toolkit>

Student Handbook: A guide to human subjects protection in research

<https://research.rutgers.edu/researcher-support/research-compliance/human-subjects-protection-program-toolkit>

### Policy

1. The dissertation committee is officially constituted after the student passes the written and oral components of Qualifying Examination Part A.
2. To constitute the dissertation committee, the candidate must file the **Dissertation Committee Form** through the Office of the Division of Nursing Science after it is signed by all members of his/her committee. **Once the committee is officially formed, the student cannot initiate changes in the membership without the approval of the Ph.D. Program Director. However, a faculty member may resign from the committee.** In the latter case, the candidate must select another faculty member and this new member must be approved by the Director of the Ph.D. Program.
3. Selection of the Dissertation Committee
  - a. Criteria for Dissertation Chairperson
    - i. Holds graduate faculty status in the School of Graduate Studies
    - ii. Has earned a research doctoral degree (e.g., Ph.D., DNSc, EdD);
    - iii. Has research experience and expertise related to some important aspect of the

- dissertation; and,
    - iv. Is available to the student regularly during the dissertation phase.
  - b. Criteria for Committee Members
    - i. Three committee members selected in consultation with the dissertation chairperson;
    - ii. Members must have a research (e.g. Ph.D.) or clinical (e.g. DNP) doctoral degree.
    - iii. Whenever possible, the four members of the Committee should possess complementary areas of expertise to guide the content and methods of the dissertation.
  - c. Composition of the Committee
    - i. Composition of the Committee
      - 1. The Dissertation Committee consists of four members: At least three of the members must be Members or Associate Members of the SGS graduate faculty, including the Chairperson. A fourth member may be selected outside of the program faculty. If the outside member does not hold a doctoral degree, a copy of the C.V. must be submitted to SGS for approval. Chairperson, two SON faculty members, and a member from outside of the SON. This outside member may be from outside of Rutgers and from outside the discipline of nursing.
- 4. Role of the Dissertation Committee:
  - a. Chairperson Responsibilities
    - i. The faculty member who is invited to become chairperson of the committee may defer acceptance until the student has submitted a specific area of inquiry or a beginning research problem that the student has identified. The chairperson of the student's research advisory committee may become the dissertation candidate's dissertation chairperson.
    - ii. The faculty member who accepts the role of chairperson becomes the student's academic and research advisor.
    - iii. After the student completes and defends the proposal and attains candidacy status, the chairperson will serve as the principal investigator for the candidate's dissertation IRB protocol - per IRB policy, assure IRB compliance, guide the preparation of the dissertation proposal, the research process, and the final dissertation.
    - iv. At the discretion of the dissertation chairperson, selected chapters of the dissertation can be written in a manuscript format. In contrast to the traditional style, this option is a mixed format in which one or more manuscripts submitted for publication comprise a portion of the dissertation. The choice of manuscript option should be approved by the dissertation chairperson no later than the date of the dissertation proposal defense.
    - v. The chairperson is responsible for ensuring that the entire committee meets with the student at least once before the student's dissertation proposal is submitted for review and approval. There should be at least two meetings of the entire committee, one early in the development of the dissertation proposal, and one closer to the time the dissertation proposal is submitted for review.
    - vi. The chairperson is responsible for contacting the Nursing Science Division

Administrative Coordinator to schedule the dissertation proposal defense meeting and the public dissertation defense.

b. Committee Member Responsibilities

- i. Be available to meet with the student; critique drafts of the developing dissertation proposal; participate actively in the committee meeting(s) on the dissertation proposal; review drafts of the final dissertation, and the final dissertation product; and share critique and concerns with the student and the chairperson.
- ii. Participate actively in the conduct of the dissertation defense and vote on the decision regarding pass/fail.

5. Responsibilities of the Student

- a. The student is responsible for the careful editing and accuracy of both the dissertation proposal and the final dissertation. The student is also responsible for adhering to the "Final Defense Form" available at (<https://grad.rutgers.edu/sites/default/files/2021-04/SGS%20Biomedical%20Final%20Defense%20forms%202021.pdf>). The chairperson shall not accept the dissertation if these standards have not been met.
- b. The student is responsible for the completion of all requirements for the degree and certification of the same. The Registrar's Office must have re-coded the record, and all paperwork must be submitted on time and proper forms with all required signatures. It is the student's responsibility to make sure all forms are signed and received by the proper authorities by the posted deadline dates of Graduate School-Newark.

6. Registration Process

- a. The student should register for dissertation credits upon advisement of the Dissertation Chairperson; and,
- b. The student must register for at least 1 dissertation research credit during the two semesters that the dissertation proposal review and dissertation oral defense are planned, even if they have completed the 24 hours of dissertation credits.

## **DISSERTATION PROPOSAL**

### **Overview**

The candidate is required to submit a dissertation research proposal for review, which should be developed under the supervision of the Chairperson and members of the dissertation committee.

### **Policy**

1. Preparation of the Dissertation Proposal
  - a. The dissertation proposal should include the first three chapters of the dissertation, including the plan for the management and analysis of the data. The proposal is characterized by a logical progression of thought, good literary style, and acceptable practices of scholarly writing.
  - b. The dissertation proposal should adhere to the most recent edition of the Publication Manual of the American Psychological Association (APA).
  - c. The dissertation proposal should be approximately 50 pages in length, double-spaced, exclusive of table of contents, references, and appendices, etc.
  - d. The title of the dissertation proposal should include an indication of the research approach (e.g., correlational, experimental, qualitative) and the major variables to be studied. The

- inclusion of the target sample is optional.
2. Dissertation Proposal Defense Meeting
    - a. The student, chairperson, and members of the candidate's committee must attend the proposal review meeting. The chairperson is responsible for recording basic points made during the meeting and the recommendations for revisions if any.
    - b. The student should be prepared to discuss the entire proposal, including potential problems that might be encountered and plans to manage such situations.
    - c. After the proposal defense, the chairperson will summarize the major points raised by the reviewers and ask for their recommendations.
    - d. The committee may choose to 1) accept the proposal as is or with minor revisions and no re-review; 2) require minor or major revisions and re-review; or 3) reject the proposal. Examples of reasons for rejection include major safety or human rights issues to research subjects; major theoretical or methodological flaws that would preclude valid or interpretable findings; or a non-feasible plan that cannot be implemented (e.g., too many subjects, too complex) within a reasonable time frame.
    - e. In the case of approval with minor revisions required, the candidate must submit a notification of the completion of the revised dissertation proposal that has the approval of the Dissertation Chairperson to the Administrative Coordinator in the Office of Nursing Science within one month of the proposal review. At this time, the properly signed Dissertation Proposal Approval Form must be submitted by the candidate to the Assistant Dean for Nursing Science/Ph.D. program, and copies of the revised proposal will be sent to each committee member by the candidate in a timely fashion. If a candidate does not put forth a proposal that is considered acceptable by the committee after two tries, the candidate can be dismissed from the program.
    - f. In the case of major revisions required or approval denied, the student must develop a significantly revised or a new proposal. The Dissertation Chairperson will work with the candidate and the Dissertation Committee to review the new proposal and all prior steps will be repeated.
  3. Required Procedures
    - a. The student candidate obtains the Dissertation Proposal Approval Form from the Administrative Coordinator, Office of Nursing Science, completes and delivers the Dissertation Proposal Approval Form after the dissertation committee has approved the proposal and affixed their signatures.
    - b. The Dissertation Proposal Form is signed by all members of the committee, including any member from outside Rutgers and, attests that the entire committee has met as a whole and approved the proposal. The completed form is submitted to the Administrative Coordinator, Office of Nursing Science within 10 days of a successful proposal defense meeting.
    - c. Concurrent with the submission of the dissertation proposal, the student must apply for IRB approval to the Office of Research and Sponsored Programs (ORSP) and, if appropriate, to the official IRB committee(s) at the site(s) of data collection. Approval from agency IRBs must be forwarded, along with the completed application form of the cooperating agencies, to the Office of Research and Sponsored Programs of Rutgers Biomedical Health Sciences (RBHS) promptly. No data can be collected until IRB approval has been obtained from RBHS ORSP.
  4. Protocol for Communication between Candidate and Chair regarding the Dissertation before Graduation

- a. For federal guidelines involving human subjects, the Dissertation Chair is considered the Principal Investigator of the dissertation project. Also, any external communication or reporting about the dissertation reflects on Rutgers and the School of Nursing. Therefore, the candidate must keep the Chair informed as follows:
  - a. Communicate with the Committee Chair before submitting any research grants to fund all or part of dissertation research.
  - b. Communicate with the Committee Chair before submitting any abstracts for conferences or publications that will report dissertation findings.
  - c. Communicate with the Chair of the Committee before submitting to the public domain any materials that are an integral component of the dissertation.
  - d. Determine the appropriateness of copyrighting the dissertation with the inclusion of any instruments (e.g. in Appendix) authored by another (whether copyrighted or not).

## **GENERAL GUIDELINES FOR THE TRADITIONAL DISSERTATION MANUSCRIPT**

Obtain from the School of Graduate Studies website the “Style Guide for Doctoral Dissertation Preparation” <https://grad.rutgers.edu/academics/graduation/electronic-thesis-and-dissertation-style-guide>. Follow this guide for all the details of style, font, margins, references, tables, figures, and formatting. The Style Guide also prescribes the format of the title page, the abstract, and the vita page. Appendix A contains a more detailed exposition of the guidelines for writing up a quantitative study.

## **TRADITIONAL DISSERTATION OUTLINE AND COMPONENTS: GUIDE FOR QUANTITATIVE STUDY**

An outline and component descriptions for quantitative studies are provided. This format is a guide. Additional or different information may be needed in select components depending upon the nature of the study. The Dissertation Advisor and Committee have the final say on the most appropriate outline to match the study. The outline guide is shown below.

- **Title Page**
- **Copyright Page (copyrighting is optional)**
- **Acknowledgments**
- **Table of Contents**
- **List of Tables**
- **List of Figures**

### **CHAPTER I. THE PROBLEM**

Discussion of the Problem

Statement of the Problem (Interrogative Form)

Subproblems (if appropriate and substantive)

Definitions of Terms - Conceptual and Operational

Delimitations

Significance of the Study

## **CHAPTER II. THEORETICAL FRAMEWORK AND REVIEW OF THE LITERATURE**

Introduction to the chapter

Theoretical framework/rationale

Empirical literature review

Well-organized evidence table that summarizes relevant information from each study discussed in the literature review

Hypotheses

## **CHAPTER III. METHODS**

Introduction to the chapter

Description of Research Setting

Sample

Description of Instruments

Procedure(s) for Data Collection

Data analysis plan

Human subjects' protection

Experimental Operational Definition (if appropriate)

Equipment (if appropriate)

## **CHAPTER IV. ANALYSIS OF THE DATA**

Introduction to the chapter

Statistical Description of the Variables

Reliability of Instruments for Study Sample

Results of hypothesis testing

## **CHAPTER V. DISCUSSION AND INTERPRETATION OF THE FINDINGS**

Introduction to the chapter

Univariate findings

Results of hypothesis testing

Relationship of findings to the extant literature

Contribution of findings to current knowledge

The usefulness of theory for understanding the study problem

## **CHAPTER VI. SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS**

Introduction to the chapter

Summary

Conclusions

Implications and recommendations (for further research; for theory development/testing; for nursing practice)

## **REFERENCES**

## **APPENDICES**

## **TRADITIONAL DISSERTATION OUTLINE AND COMPONENT: GUIDE FOR QUALITATIVE INQUIRY**

Qualitative inquiry is concerned with modes of systematic inquiry in which knowledge is generated for understanding human beings within the larger cultural, political, and social contexts. The philosophical assumptions underlying these modes of inquiry are steeped in the naturalistic paradigm, which provides an alternative perspective toward the meaning of reality. These assumptions provide the base for methods that are appropriate for gathering and interpreting data relevant to questions about human behaviors.

The primary data sources in qualitative inquiry are texts, which may be field notes, interviews, or any printed or visual data available for reading, reviewing, or hearing.

The subject matter of qualitative inquiry centers on understanding the meanings human beings give to past and/or current ideas and experiences. The form and characteristics of the data depend on the focus of the research, the purpose of the qualitative study, and the chosen research method.

The presentation of research findings follows the writing convention of the humanistic essay more so than the scientific article. The results generally are offered in an interpretive-narrative writing style, and typically the findings are presented and discussed in appropriate chapters.

Following is a general outline for research based on a naturalistic study. The Dissertation Advisor and Committee have the final say on the most appropriate outline to match the study.

- **Title Page**
- **Copyright Page (copyrighting is optional)**
- **Acknowledgments**
- **Table of Contents**
- **List of Tables**
- **List of Figures**

### **CHAPTER I. INTRODUCTION AND THEORETICAL PERSPECTIVE**

The Concern to be addressed  
The Phenomenon of Interest  
The Purpose of the Research  
Foundational Assumptions  
The Significance of the Study

### **CHAPTER II. LITERATURE REVIEW**

Purpose of the Literature Review in Qualitative Inquiry  
Background of the Phenomenon  
Related Phenomena  
Research Question(s)  
Well-organized evidence table that summarizes relevant information from each study discussed in the literature review

**CHAPTER III.        METHODS**

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Characteristics of the Participants  
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**CHAPTER V.        DESCRIPTION AND DISCUSSION OF THEMES**

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Related Themes  
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**TRADITIONAL DISSERTATION COMPONENT OUTLINE: Guide For  
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**CHAPTER VI.        DISCUSSION OF FINDINGS**

The Research Question(s)  
Relationship among Themes  
Relationship of Findings to the Extant Literature  
Contribution of Findings to Current Knowledge

**CHAPTER VII.        CONCLUSION**

Summary  
Conclusions  
Strengths and Limitations  
Implications for Knowledge Generation and Practice  
Recommendation

## DISSERTATION MANUSCRIPT OPTION

The manuscript option is formally recognized by the SON and SGS. A benefit of the manuscript option is that parts(s) of the dissertation contribute(s) to the student's publication record earlier than with the traditional dissertation format. This option would make the Ph.D. student a stronger candidate for faculty positions or post-docs at research-intensive schools after graduation.

**Format:** Students who choose this option will be able to submit 1-3 manuscripts for the corresponding chapters of the dissertation. Examples of acceptable topics for the manuscript(s) include a review of the literature or systematic review relevant to the topic; a discussion of the theoretical framework/model/theory; review of instrument design, development, and testing; results of pilot studies or results of the main study.

Details of the manuscript option are as follows:

1. The student and their dissertation chairperson should discuss the planned format of the dissertation and decide if the manuscript option is a feasible choice as soon as the academic advisor or faculty member assume their role as the dissertation chairperson. This should occur as early as possible, but certainly no later than the proposal defense date.
2. If the manuscript option is desired, the student and dissertation chairperson will agree to substitute 1-3 manuscripts for the corresponding chapters of the dissertation, as outlined above. The manuscripts must be in a publishable format- either submitted, under review, or accepted for publication at the time of the dissertation defense. Written permission from the journal editor to include the manuscript(s) in the dissertation document is required to prevent copyright infringement. Other requirements may be determined following input by the student's Dissertation Committee- this may include the number and type of manuscripts permitted and the identification of a peer-review journal for publication.
3. At least one manuscript must be based on the results of the main study.
4. The dissertation should read as one cohesive document. In addition to the manuscripts, students who choose this option must also include:
  - a. An abstract
  - b. Table of contents that includes each chapter and figures and tables
  - c. An introductory chapter that includes a presentation of the overall unifying theme of the dissertation, addresses the distribution of content across manuscripts or chapters, discusses how the manuscripts and chapters address the theme, and explains the relationship of the manuscripts to each other. Also, the Introduction should discuss the overall need and significance of the research topic and study and the originality of the findings.
  - d. A summary chapter that consists of synthesis and integration of the overall findings of the study, integrating the content of all manuscripts and chapters. This synthesis should consider the unifying theme and an explanation of the importance of the manuscripts concerning the main topic. Directions for future research and implications of results for nursing practice and policy, as appropriate, should be identified.

5. Manuscripts should be formatted appropriately, using APA style references or conforming to the requirements established by the journal to which the paper was submitted.
6. When co-authored papers are included in the dissertation, the student must be the first author of the paper.
7. Students can use publishable papers or accepted manuscript(s) that were previously included in the qualifying exam as part of the manuscript option. When included manuscripts are accepted for publication, be sure to obtain written permission from the journal editor to include them in the dissertation document.
8. The student Committee will ultimately review the manuscripts and other chapters and content as part of the final examination, like a traditional dissertation defense.
9. Any manuscript submitted or published that is a component of the dissertation will be appropriately acknowledged in the dissertation, per SGS policy at [https://grad.rutgers.edu/sites/default/files/2021-07/acknowledgment\\_of\\_previous\\_publications.pdf](https://grad.rutgers.edu/sites/default/files/2021-07/acknowledgment_of_previous_publications.pdf)

### **Dissertation Defense and Submission of the Completed Dissertation**

1. The final public presentation shall be held under the auspices of the candidate's doctoral dissertation committee and the candidate will be present on campus. The candidate may be questioned by members of the audience in advance of the private questioning by the Dissertation Committee members. This can also occur with some of the committee members online or by telephone.
2. The candidate must defend the dissertation privately to the Dissertation Committee and otherwise satisfy the committee that he or she is qualified to receive the degree of Doctor of Philosophy. After the public presentation, the Dissertation Committee will move to a private room to complete the questioning and will ask the candidate to leave during the Dissertation Committee voting process.
3. For one or more negative votes, the candidate fails the dissertation defense. The Committee must make recommendations to the Chair regarding the next steps. The Committee may recommend significant revisions of the dissertation or additional study/coursework in the area of the knowledge deficiency. A timeline will be set. The candidate will be given a second opportunity to complete the oral defense. For two failures, the candidate will be dismissed from the program.
4. Once the Dissertation Committee votes to confer the degree, the proper forms must be signed and the candidate is responsible for returning them to the Office of the Dean, School of Graduate Studies on or before the published deadline date. Go to important information pertaining to graduation and dissertation including dissertation submission, checklist materials/forms, and graduation/commencement at <https://grad.rutgers.edu/academics/graduation>

5. After the committee accepts the dissertation, the student makes any recommended final edits to the dissertation and confirms that the dissertation adheres to the approved Rutgers format as indicated in the instructions (<https://grad.rutgers.edu/academics/graduation/electronic-thesis-and-dissertation-style-guide> ). Dissertations that do not conform to the approved RU format will not be accepted. The approved dissertation must be converted to a PDF document then uploaded online via the RUetd (Rutgers University Electronic Thesis and Dissertation) website, available at <https://www.libraries.rutgers.edu/submit-your-etd> for permanent record.

## **PUBLICATION OF DISSERTATION AND ACADEMIC DATA**

Once the completed dissertation is electronically uploaded to RUetd (Rutgers University Libraries Electronic Thesis and Dissertations) for permanent archiving (<https://etd.libraries.rutgers.edu/login.php>), access to your dissertation will be via RUcore repository available at <https://rucore.libraries.rutgers.edu/etd/>. Additional information is available concerning copyright (<https://www.libraries.rutgers.edu/research-tools-and-services/copyright-guidance> ), embargo requests for online publication of the dissertation ([https://grad.rutgers.edu/sites/default/files/2021-07/procedure\\_for\\_deferring\\_publication\\_of\\_dissertations.pdf](https://grad.rutgers.edu/sites/default/files/2021-07/procedure_for_deferring_publication_of_dissertations.pdf) ), and ProQuest publication services (<https://www.etsadmin.com/main/home?siteId=1092> ).

## APPENDIX A

### DETAILED GUIDE FOR WRITING A QUANTITATIVE STUDY

#### CHAPTER I THE PROBLEM

##### **Discussion of the Problem**

In this section, the problem should be described clearly and concisely. The description of the problem will vary according to the state of knowledge regarding the phenomenon of interest and the type of research approach that will be used in the study. Typically, in a non-experimental study, the dependent variable is discussed as the phenomenon that represents the “overarching problem” and the independent variables presented as real or potential contributors to the problem. In an experimental study, the outcome measure(s) is typically discussed as the overarching problem and the intervention is discussed as a potential strategy that can reduce or ameliorate the problem.

##### **Study Purpose and Research Questions (Problem Statement)\***

The study's purpose should emerge from the above description of the problem. An overarching *problem statement* should be presented using the interrogative form and it should meet the criteria for a good problem statement. For example:

- A. *What is the relationship between self-disclosure, interpersonal dependency, and life change events to loneliness in young adults?*
- B. *What is the effect of X treatment on the rate of return to functional independence among elderly subject's post knee replacement surgery?*

The research question (statement of the problem) may then be presented as sub-questions whereby each independent variable is linked to the dependent variable (or variables if there are more than one) in question form. For example:

- A. *What is the relationship between self-disclosure and loneliness in young adults?*
- B. *Sub-problems may not be appropriate in some cases.*

##### **Definition of Terms \***

Each variable in the problem statement should be defined conceptually and operationally. In experimental studies, define the experimental intervention(s) (treatment conditions) conceptually in this section and operationally in Chapter III. If the sample to be studied represents a phase of human development or has an acute or chronic illness, these terms also should be defined. For example, if the sample will consist of patients who have had an acute myocardial infarction, this term should be defined and documented.

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\* Asterisk indicates that the section should be written in the future tense for the Dissertation Proposal and the past tense for the final Dissertation.

**Delimitations (Sample Inclusion/Exclusion) \***

In this section, the parameters (characteristics) of the sample that will be studied should be specified. It should be clear who will be included and who will be excluded from the analysis of the data and why. Therefore, the reasons for the delimitations imposed on the sample should be documented, if possible.

**Significance**

In this section, discuss why it is important to society in general and nursing in particular to investigate the research problem. State clearly how the research findings will contribute to nursing knowledge and potentially to nursing practice.

## **CHAPTER II. THEORETICAL FRAMEWORK AND REVIEW OF THE LITERATURE**

It is understood that the student, to become a content expert regarding the variables under investigation, will do a comprehensive review of the literature on each variable in the problem statement. However, only the literature pertinent to the development of relationships or differences to be tested by the hypotheses should be reported.

This chapter should be introduced in one paragraph that succinctly indicates the organization of the content that will be presented. There are two distinct aspects of discussion in this chapter. The first is a description of the theoretical framework that guides the study. The second aspect of the discussion focuses on a presentation of a critical analysis of empirical studies pertinent to the present investigation.

**Theoretical Framework**

The Theoretical Framework provides the theoretical basis for the derivation of the hypotheses. This section of the chapter provides a discussion of the theory, its concepts and propositions, and how the phenomena relevant to the study represent relevant theoretical concepts. The section should end with a summary of the theoretical linkages examined in the study, and a diagram of the theorized model to be tested.

**Literature Review**

This section presents a critical analysis of an appropriate sample of empirical studies pertinent to the present investigation. Across the studies reviewed, empirical evidence should be provided that demonstrates the extent to which the theorized relationships between study variables are supported or not. Group the studies under appropriate headings (e.g., by theorized relationships). Each segment of studies should begin with a description of the literature search strategy and how the sample of studies was delimited to the final number included in the segment for review and analysis. Critically analyze the contributions of the studies to knowledge about the relationships hypothesized for the proposed study, the methodological or sample-size flaws that may explain conflicting findings, and the problems inherent in definitional and instrument discrepancies. The literature review ends with a “summary of the literature review and knowledge gaps” section that pinpoints the present state of knowledge, gaps in the knowledge, and how this study addresses knowledge gaps. An evidence table is included that summarizes relevant information for each study.

### **Hypotheses\***

Formulate and state research hypotheses that are derived from the theoretical propositions. Where appropriate, each hypothesis should answer a sub-question. An example of a hypothesis statement is *There is an inverse relationship between self-disclosure and loneliness in young adults*. In other cases, the hypotheses derive directly from the overarching research question (problem statement).

## **CHAPTER III. METHODS**

This chapter should be introduced in one paragraph that briefly indicates the research design of the study and the methods that will be presented.

### **The Research Setting\***

Describe the characteristics of the research setting in which data will be collected. For example, if high school students will be studied, describe the state or region of the country in which the high school is located while maintaining its anonymity. In some instances, the researcher may not be able to describe the specific research setting until after the data are collected. Therefore, the specific research setting should be indicated in the Dissertation Proposal and described more fully in the final dissertation. Also, in some instances, it may be necessary to only describe the specific research setting, e.g., laboratory, and its' location. For analyses of existing datasets, the source of the dataset should be described.

### **The Sample\***

For the dissertation proposal, restate the characteristics of the sample that will be used to investigate the research problem. Describe the sampling method for bio-behavioral research or experimental research, be precise in listing exclusion criteria for the experimental and control groups. If appropriate to the research design, describe the method of random assignment or matching procedure that will be used. Substantiate from the literature the sample size needed to test the hypotheses. Present the results of a power-calculation to justify the sample size chosen.

For primary studies, indicate the number of subjects approached to participate, the number of subjects who voluntarily participated in the study, the number of subjects who withdrew (if any), and the number of subjects in the final sample, that is, those subjects included in the data analysis. For example:

- A. *Of the 270 tenth graders initially approached to participate in the study, 182 students agreed to participate. The responses of 36 students were excluded from the analysis due to the delimitations of the study. Two students withdrew from the study and the incomplete responses of 3 students were discarded. The final sample consisted of 141 students.*
- B. *During the duration of the study, 150 persons received the surgery and 75 fulfilled the study criteria. Of these 75, 50 agreed to participate and signed consents. There were 7 dropouts: 3 had post-op complications that prevented the use of the experimental protocol, 2 changed*

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\* Asterisk indicates that the section should be written in the future tense for the Dissertation Proposal and the past tense for the final Dissertation.

*their mind about participating, and 2 died in the post-operative period.*

For analyses of existing datasets, describe the analytic sample. A description should include the number of subjects or cases and the variables in the dataset that will be analyzed. For example, a description of the anticipated analytic sample is described below.

- A. *Since postpartum hemorrhage (PPH) occurs in 1% to 5% of women, it is anticipated that there were approximately 1000 to 5000 NJ hospital admission encounters that included a diagnosis of PPH in 2014. It is anticipated that 8 variables in the dataset will be examined as independent variables including race, age, median income, and chronic hypertension, diabetes, gestational diabetes, and forceps delivery. ICU use (yes/no) will be examined as the dependent variable. Power analysis for chi-square, correlational, and logistic regression analyses were calculated to determine the appropriate sample size to yield sufficient power for these statistical techniques. Power analyses indicated that an anticipated admission encounter sample of at least 1000 will be more than sufficient to yield statistical power of .80 at a .05 significance level for bivariate and logistic regression analyses.*

For the final dissertation, the analytic sample is described as follows:

- B. *The analysis sample was comprised of 1988 admission encounters by women in NJ who experienced postpartum after childbirth.*

Then, using frequencies and/or percentages, describe the characteristics of the final sample, which must include gender and race. Data collected on additional socio-demographic characteristics of the sample such as age should be described by the mean, standard deviation, and range. If there is more than one group of subjects under investigation, e.g., in experimental and descriptive-comparative studies, describe each group separately. Descriptive statistics of selected characteristics of the sample(s) should be presented in a table. In experimental studies, statistics for each comparison group should be performed to determine if there were statistically significant differences between or among the groups on demographic characteristics.

### **Instruments\***

It is understood that paper and pencil instruments used for the doctoral dissertation have acceptable reliability coefficients (.70 or greater) and sufficient evidence of validity. Biomedical instruments also must be valid and reliable according to accepted practices in biometrics.

Each instrument used to collect data in the study must be addressed in this section; this includes biomedical instruments and technological equipment. If the instrument(s) to be used do not have published reliabilities for the sample that will be investigated, a pilot study should be conducted before the dissertation proposal and the results reported. If a paper and pencil instrument is developed for the investigation, describe in detail the steps used to establish the psychometric properties of the instrument, which should include a pilot.

In this section, treat each instrument separately; use the name of the instrument as a heading. Then, in one paragraph, report the purpose, description, method of administration, scale format, range of possible scores, and scoring procedure for the instrument. Then in one paragraph, report the published reliabilities obtained on the instrument in previous research, focusing preferably on those

reliabilities obtained on a sample similar in characteristics to one to be studied in the present investigation. Besides, the student should describe the published evidence of validity obtained on the instrument in previous research, including that evidence obtained on a sample or samples similar in characteristics to the one to be studied in the present investigation.

For biomedical instrumentation describe the calibration procedures, the temperature and humidity specifications, and the step-by-step procedures to decrease reliability problems.

#### **Procedure for Data Collection\***

For primary studies, restate the specific research setting in which the data will be collected. Then describe when, how, and by whom that data will be collected. Describe how the constancy of conditions will be maintained in the specific research setting, whether natural or laboratory. Using published ethical guidelines, discuss how the rights of human subjects will be protected; indicate in the final dissertation that IRB approval was obtained.

For biomedical data collection specify the exact step-by-step procedure for data collection, handling/storage of specimens, and the procedure for the testing and scoring/scaling of the results.

For analysis of existing datasets, describe how the dataset will be obtained, who will have access to it, and how it will be stored and secured.

#### **Experimental Operational Definition\***

For experimental and quasi-experimental studies, describe how the independent variable will be manipulated. The experimental intervention(s) (treatment conditions) should be discussed in enough detail so that the study could be replicated. When there are two or more treatment conditions, the descriptions should differentiate one from the other(s). Steps taken to assure the validity of content and/or consistency of process should be described for select treatment conditions involving experimental interventions. In quasi-experimental studies, steps taken to control for extraneous independent variables should be discussed. Any equipment used as part of the treatment conditions should be described in detail.

#### **Plan for Data Analysis\***

For the dissertation proposal, the plan for analysis of the data should be presented in Chapter III. The plan should indicate the statistics that will be used for testing the hypotheses, the level of significance (alpha) at which the research hypotheses will be accepted, and the plan for human subject's protection and/or data security (e.g., IRB approval procedures, identified and/or de-identified data storage and backup procedures, persons who will have access to the data, procedures. This section is deleted from Chapter III in the final dissertation.

## **CHAPTER IV. ANALYSIS OF THE DATA**

This chapter should be introduced in one paragraph. Initially, state the purpose of the study in the past tense. Briefly indicate for whom the data were collected, and the instruments used. End the

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\* Asterisk indicates that the section should be written in the future tense for the Dissertation Proposal and the past tense for the final Dissertation.

paragraph by stating that the study results are presented in this chapter.

### **Sample Description**

Restate the sampling method(s) used; how the required sample size based on power analysis was substantiated, and describe the sample characteristics. Include a table that lists the descriptive statistics for the sample (e.g., mean age, racial distribution, gender distribution, etc.).

### **Statistical Description of the Variables**

In this section, discuss the descriptive statistics (range, median, mean, and standard deviation) obtained on the responses of the sample to the study instruments. A description of the extent to which the study variables approximate a normal distribution is also presented. In correlational studies, these statistics should also be presented in a table. In an experimental study using a pre-test-post-test design, descriptive statistics obtained on the responses to the instrument(s) used should be presented in a table.

### **Psychometric Properties of Instruments**

Unless an instrument has been developed for one of the study variables, the psychometric properties of instruments reported in this chapter will involve reporting only the alpha coefficients obtained on the responses of the sample to the study instruments. Briefly discuss the reliabilities obtained, using the criterion for acceptable reliability coefficients as a guide. If more than one instrument has been used in the study, present the alpha coefficients in a table.

If an instrument has been developed for the study and factor analysis is performed on the responses of the sample to the instrument in the actual study, present the findings in a table and discuss them in a narrative.

For biomedical research, describe the results of reliability tests performed during sample analysis and the results of the calibration studies on the instruments throughout data collection.

### **Results of Hypothesis Testing**

Introduce this section by stating the statistics used to test the hypotheses and, when indicated, whether a one- or two-tailed test was used. Indicate the statistical package used to analyze the data. Then, treat each hypothesis separately, using Hypothesis 1, Hypothesis 2, and so forth, as subheadings. Restate the research hypothesis under the subheading, indicate the results obtained when testing the hypothesis (value and probability level) and whether the hypothesis was supported. Do not interpret the findings, simply report them.

## **CHAPTER V. DISCUSSION OF THE FINDINGS**

It is understood that the results obtained when testing the hypotheses are interpreted in this chapter and that meanings are given to the findings in terms of the theoretical relationships that were presented in earlier chapters.

Briefly introduce this chapter by restating the purpose of the study and the theoretical relationships developed. Then, discuss each hypothesis separately. Use the following guidelines for interpreting

the hypotheses.

1. If the hypothesis is supported, discuss the findings considering the explanatory or predictive level theory that served to develop the theoretical relationship from which the hypothesis was derived. In correlational studies, consider the strength of the relationship in terms of the magnitude of the correlation found, also realizing that correlation does not mean causation. Do not "go beyond the data" with your interpretation. In quasi-experimental studies, consider threats to internal validity as competing explanations for obtained results.
2. If the hypothesis is not supported, discuss the findings first in terms of shortcomings of the theory proposition from which the hypothesis was derived. Consider theoretical reasons for why the hypothesis was not supported. Then, consider methodological problems that might have occurred in the conduct of the study that could have contributed to the non-significant finding. In experimental studies consider the dosage issues, effect size issues, and sample size issues as possible reasons for non-significance.
3. If the hypothesis is significant but the results are opposite to those hypothesized, it is understood that the researcher has critically scrutinized the data analysis procedures before accepting and reporting the finding. The discussion should focus on both theoretical and methodological reasons for this significant finding that was not hypothesized.

This chapter ends with a discussion of the usefulness of the theory that guided the study for understanding the problem examined in the study.

## **CHAPTER VI. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS**

### **Summary**

This chapter begins with a summary of the study that summarizes the major components addressed in the previous chapters, e.g., the purpose of the study, the theoretical relationships developed in the study, the hypotheses, a brief description of the sample, the instruments used, the procedures for analysis, and the results. The summary should be no longer than four (4) pages.

### **Conclusions**

Although the findings from the testing of the hypotheses should guide the conclusions drawn, do not restate the findings as conclusions. Based on the findings make general concluding statements about the theory (new knowledge) developed in the study.

### **Implications for Nursing**

Discuss the theoretical and practical implications of the findings for nursing.

### **Recommendations**

Based on the findings, specify areas for future study. These areas should be enumerated and briefly discussed. Include as appropriate specific changes in nursing practice that should emanate from the study results, policy implications, and directions for further research.

## APPENDIX B

### PHD PROGRAM COURSE DESCRIPTIONS

#### **705:676 - Measurement of Health Care Phenomena (3)**

This course will provide an overview of the links between theory and measurement, data collection methods, and critical issues in measurement. A combination of theory, methods and skill development will be incorporated into the course. Teaching- learning methods include lecture, discussion, computer lab data assessment using SPSS, and selected homework assignments. The assigned select readings will be used as the focus for class discussion. The critical evaluation of the concepts underlying measurement reliability and validity and the construction of measurement tools and their use in quantitative research are explored.

***Prerequisite: 705:682, 683, 685***

#### **705:677 - Qualitative Research Methods (3)**

This course is concerned with the principles and modes of qualitative research design in which knowledge is generated for understanding human beings and the nature of their past and present transactions with themselves and their environment. Students will critically analyze the elements of systematic qualitative inquiry for gathering and interpreting data relevant to specified questions about human behaviors and its influence knowledge generation, theory development, research and the evolving discipline of nursing.

***Pre or Co-requisite: 705:682***

#### **705:678 - Theory and Application to Nursing Research (3)**

This course focuses on the relationship of theory to nursing research with an emphasis on explanatory and predictive theory development, analysis, evaluation and testing. Students are guided to consider how the nature of the research problem and theory guides the choice of research method. Emphasis is also placed on the identification, review, analysis, and integration of key theory concepts and relationships in the student's own planned research.

***Pre or Co-requisite: 705:682***

#### **705:679 - Evidence-Based Policy Development (3)**

This course focuses on the leverage of nursing research in the development of evidence-based health policy in the private and public policy arenas. Theoretical bases and strategies for evidence-based health policy development will be analyzed. Leadership skills in the areas of influencing evidence-based policy, garnering grass roots support, and developing a policy message for the media and policy-makers will be developed. Examples of translation of NIH-funded research into health policy decisions at the professional, organizational, state, federal, and international levels will be critiqued, and students will analyze the implications of their proposed research on policy development.

#### **705:681 - Quantitative Methods for Nursing Research (3)**

This course covers the definition, utilization, and critique of the rigor for non- experimental and experimental quantitative research designs, study development, and analysis of quantitative data for research in nursing and patient care. Students link theory with operational techniques in the design, methodology, and measurement of their phenomena of interest. The

course provides strategies and application for power analysis, sampling, measurement, the logic of causal inference. The course will introduce students to some additional multivariate methods, such as reliability analysis, correlation, latent class analysis including factor analysis and structural equation modeling with applications to substantive research questions.

**705:682 - Philosophy of Nursing Science and Knowledge Development (3)**

This course focuses on the historical and contemporary philosophical bases of nursing science through critically analyzing the viewpoints of natural science, integrative science, human science and ethics that underpin nursing knowledge, theory and research. Students will synthesize the philosophical positions of phenomena relevant to nursing research to further develop nursing knowledge.

**705:683 - Statistics for Nursing Research I (4)**

This course introduces the basics of statistics used in nursing/clinical research to summarize numeric data obtained from primary data collection, surveys, and experiments. The topics include frequency distribution, central tendency, variability, probability theory, and estimation. The student also learn how to test hypotheses for group differences in means (z test, t test, ANOVA, post-hocs) and for association between two variables (correlation, crosstabs, chi-square test). Students will also learn non-parametric tests for group mean differences. A weekly laboratory session is included, to give students hand on experience with various types of software used in data analysis.

***Prerequisite: Basic Statistics***

**705:684 - Advanced Qualitative Research (3)**

This course provides critical analysis of the many types of qualitative research methods, emphasizing methodological assumptions and approaches for the purpose of application to research questions. Students will focus on the practical aspects of design, entrée, ethics, data-gathering techniques (interviewing, observing), data recording, data management and data analysis. During this course, students will conduct a small pilot study related to their phenomenon of interest and critique their data collection and data analysis processes.

***Prerequisites: 705:677, 682***

**705:685 - Statistics for Nursing Research II (4)**

This course builds upon the basics of statistics used in nursing/clinical research taught in Statistics for Nursing Research I. Topics include Multiple Regression (Simultaneous and Stepwise/Hierarchical), Curve Estimation/Transformations, Logistic Regression (Binary and multinomial). Additional topics include Structural Equation Modelling/ Path Analysis (Continuous and dichotomous Variables. A weekly laboratory session is included, to give students hand on experience with the various types of software used in data analysis.

***Prerequisite: 705:683***

**705:686 - Advanced Quantitative Analytical Methods for Nursing Research (4)**

This is a course in advanced quantitative analytical methods. Students taking the course have already had introductory course work in research methods, measurement theory, basic statistics and probability, and the linear model as applied through multiple regressions. The readings and class time focus on three topics: advances in ordinary least squares (OLS)

regression including mediation models, moderation models, and conditional process analysis; multilevel modeling (also known as hierarchical linear model) including longitudinal studies; and, path analysis. Topics are enhanced by lab work using statistical packages including IBM-SPSS, R Statistics, and HLM.

**705:687 - Role of the Nurse Scholar (3)**

This seminar addresses the responsibilities and activities of a scientist in the health professions including ethical issues; scientific freedom and social responsibility; mentoring; interdisciplinary research and team science; conduct of culturally competent scholarship; peer review; building a systematic program of research; research funding and grantsmanship; scholarly writing, presentations and publications

**Prerequisite:** 705:682, 677, 678, 679, 681

**705:688 - Practicum in the Professoriate Role (3)**

This course is required of PhD students preparing for the professorial role. The course focuses on university teaching and the products of scholarship expected of faculty who intend a career in a research-oriented university. The course is individualized to the needs of each student.

**705:689 - Research Practicum (3)**

The purpose of this experience is to allow the student to participate in phases of the research process under the tutelage of an experienced mentor. This experience precedes the student's independent dissertation research. The student works closely with a mentor who is a doctoral-prepared faculty member (or non-faculty researcher with comparable credentials--e.g. NIH Intramural Researcher) who is conducting a program of research related substantively and/or methodologically to the student's anticipated dissertation topic. The student may work with his/her advisor or another faculty member in the College of Nursing; or the student may carry out the research experience in another setting in which state-of-the-science research is being conducted. In this experience, the student is expected to participate actively as a member of the research team and to produce a tangible scholarly product. Specific activities and products are planned under the guidance of the advisor in collaboration with the mentor, and depend on the nature and stage of the research project.

**Prerequisites:** 705:677, 683, 685

**705:701 - Dissertation Seminar (3) (combines former Dissertation Seminars I and II)**

This seminar provides students with an opportunity for dialogue with peers regarding their progress on the dissertation proposal. The focus of the course is student presentations of their dissertation plan and work in-progress with group feedback to strengthen the dissertation proposal.

**Prerequisites:** 705:676, 677, 678, 679, 681, 682, 683, 685, 687, 689, and 684 or 686

**705:703 - Dissertation Research (15-18)**

Students develop and complete dissertation research under the supervision of a designated member of the nursing graduate faculty.

**Prerequisite:** 705:701