



Ph.D. Program in Nursing

Handbook for Students (Matriculated Fall 2019 and before)

Rutgers, The State University of New Jersey
Graduate School-Newark
and
School of Nursing

Revised September 2021

Table of Contents

GOAL, CURRICULUM, AND PROGRESSION OF STUDENTS ENROLLED IN THE PH.D. PROGRAM IN NURSING.....	5
Program Goal	5
Program Outcomes.....	5
Expected Competencies of a Rutgers School of Nursing Ph.D. Graduate	5-6
Curriculum: Post Master’s Option	6-7
Full and Part-time Study	7
3 Year Full-time Sample Plan of Study	8
4-Year Part-Time Sample Plan of Study.....	9
Post Baccalaureate to PhD Option.....	10-11
Post Baccalaureate PhD Program Curriculum – Leadership Master’s Full Time Plan of Study	11
Student advisement.....	12
Cognates.....	12
Research Practicum Experience.....	12-13
Program Milestones	13
Manuscripts and Research Grant Proposals.....	13-14
Important Academic Policies.....	14-16
QUALIFYING EXAMINATION FOR ADMISSION TO CANDIDACY.....	17
Statement of Purpose:	17
Rationale:	17
Requirements:	17
Procedure	17-20
Theoretical framework paper: RUBRIC.....	21-23
Literature review paper: RUBRIC.....	24-25
Methods paper: RUBRIC.....	26-27
QUALIFYING EXAMINATION COMMITTEE FORM– PHD IN NURSING PROGRAM	28
QUALIFYING EXAMINATION GRADE FORM– PHD IN NURSING PROGRAM.....	29
DOCTORAL DISSERTATION	30-31
Overview	30
Policy	30-31
DISSERTATION PROPOSAL	32-34
Overview	32
Policy	32-34
GENERAL GUIDELINES FOR THE TRADITIONAL DISSERTATION MANUSCRIPT	35
TRADITIONAL DISSERTATION OUTLINE AND COMPONENTS: GUIDE FOR QUANTITATIVE STUDY	35-36
TRADITIONAL DISSERTATION OUTLINE AND COMPONENTS: GUIDE FOR QUALITATIVE INQUIRY	37-38
DISSERTATION MANUSCRIPT OPTION	39-40
DEFENSE and SUBMISSION OF THE COMPLETED DISSERTATION.....	40-41
APPLICATION FOR THE CONFERRAL OF THE DEGREE	41
PUBLICATION OF DISSERTATION AND ACADEMIC DATA	41
APPENDIX A - DETAILED GUIDE FOR WRITING A QUANTITATIVE STUDY	42-48

APPENDIX B: SAMPLE CANDIDACY FORM.....	49
QUALIFYING EXAM COMMITTEE REPORT.....	50
APPENDIX C: DISSERTATION COMMITTEE FORM– PHD PROGRAM	51
APPENDIX D: DISSERTATION PROPOSAL APPROVAL FORM	52
APPENDIX E: DISSERTATION DEFENSE FORM.....	53
APPENDIX F: CURRICULUM TRACKING SHEET.....	54
APPENDIX G: PLAN OF STUDY: PLANNING SHEET	55
APPENDIX H: PHD PROGRAM COURSE DESCRIPTION.....	56-58



Welcome to the Rutgers' School of Nursing Ph.D. in Nursing Science Program!

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!

A handwritten signature in black ink that reads "Charlotte Thomas-Hawkins".

Charlotte Thomas-Hawkins, PhD, RN, FAAN
Associate Dean & Associate Professor, Division of Nursing Science

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 your 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 to 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 Option

The curriculum requires a **minimum of 66 credits**. Nine of these 66 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 66 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
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	15 credits

TOTAL: 66 credits minimum

Note. For students receiving Nurse Faculty Loan Program (NFLP) funds, an additional 6 credits focused on education are required.

Full and Part-time Study

Students who meet the admission requirements of the Graduate School-Newark 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: 15; *Two additional education-focused courses required for students receiving NFLP funds for a total of 72 credits, minimum.**

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	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		
Subtotal Credits	10		10		6
Fall Semester Year 2	Cr	Spring Semester Year 2	Cr	Summer Year 2	Cr
Advanced Quantitative Methods for Nursing Research or Advanced Qualitative Nursing Research Methods	4	Role of the Nurse Scholar Qualifying Exam	3	Begin Dissertation Proposal	
Research Practicum	3	Evidence-Based Policy Development	3	Dissertation Seminar	3
Cognate	3	Role of Professoriate	3	Cognate	3
Subtotal Credits	10	Subtotal Credits	9		6
Fall Semester Year 3		Spring Semester Year 3		Summer Year 3	
Dissertation Research	6	Dissertation Research	6	Dissertation Research	3
DEFEND PROPOSAL				DEFEND DISSERTATION	
Subtotal Credits	6		6		3
Total Minimum Credits					66

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

***Minimum dissertation credits:15; * Two additional education-focused courses required for students receiving NFLP funds for a total of 72 credits, minimum**

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		
Subtotal Credits	7		7		3
Fall Semester Year 2	Cr	Spring Semester Year 2	Cr	Summer Year 2	Cr
Qualitative Nursing Research Methods	3	Quantitative Methods in Nursing Research Begin Draft of Review of Literature QE Paper	3	Measurement of Health Care Phenomena	3
Role of the Professoriate	3	Cognate	3	Cognate	3
Subtotal Credits	6	Subtotal Credits	6		6
Fall Semester Year 3		Spring Semester Year 3		Summer Year 3	
Advanced Quantitative OR Advanced Qualitative Research	4	Role of the Nurse Scholar QUALIFYING EXAM	3	Dissertation Seminar	3
Research Practicum	3	Evidence-Based Policy Development	3		
Subtotal Credits	7		6		3
Fall Semester Year 4		Spring Semester Year 4		Summer Year 4	
Dissertation Research DEFEND PROPOSAL	6	Dissertation Research	6	Dissertation Research	3
Subtotal Credits	6		6		3
TOTAL PROGRAM CREDITS					66

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 91-92 credit program includes a 30 credit accelerated 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 that will be developed in consultation with the Program Specialty Director.
2. As with all master's degree programs in the SON, students will not need to take the GRE for admission.
3. 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.
4. Various financial aid options will be explored for incoming students, such as funding through the Nurse Faculty Loan Program and Teaching Fellowships, if available.
5. Given the rigorous nature of this program, full-time study is strongly recommended.

Post Baccalaureate Ph.D. Program Curriculum – SAMPLE Leadership Master’s Full-Time Plan of Study (schedule of course offerings subject to change)

		Summer
	BEFORE STARTING PROGRAM	NURS 6060 Clinical Inquiry for EBP (3)
Year 1 Fall	Year 1 Spring	Year 1 Summer
CLDER 6450 Quality & Safety in Healthcare Theory (3)	CLDR 6420 Organizational Complexity Theory (3)	NURS 6040 Social Determinants of Health (3)
CLDR 6460 Quality & Safety in Healthcare Practicum (3)	CLDR 6430 Organizational Complexity Practicum (3)	Management of Health Data (3)
CLDR 6400 Leadership Across the Continuum Theory (3)	CLDR 6510 Managing Human Capital (3)	
CLDR 6410 Leadership Across the Continuum Practicum (3)	CLDR 6530 Healthcare Economics & Business Practices (3)	
TOTAL CREDITS = 12	TOTAL CREDITS = 12	TOTAL CREDITS = 6
Year 2 Fall	Year 2 Spring	Year 2 Summer
705:682 Philosophy of Science & Knowledge Development (3)	SUGGESTION: COMPLETE THEORY QE PAPER	SUGGESTION: COMPLETE REVIEW OF LITERATURE QE PAPER
	705:678 Theory & Application to Nursing Research (3)	
705:677 Qualitative Methods (3)	705:681 Quantitative Methods (3)	705:676 Measurement of Healthcare Phenomena (3)
705:683 Statistics I (4)	705:685 Statistics II (4)	Cognate (3)
TOTAL CREDITS = 10	TOTAL CREDITS = 10	TOTAL CREDITS = 6
Year 3 Fall	Year 3 Spring	Year 3 Summer
705:686 or 684 Advanced Qualitative OR Quantitative Methods (4)	QUALIFYING EXAM	Cognate (3)
	705:687 Role of the Nurse Scholar (3)	705:701 Dissertation Seminar (3)
		COMPLETE DISSERTATION PROPOSAL
Cognate (3)	705:679 Evidence Based Policy (3)	
705:689 Research Practicum (3)	Role of Professoriate (3)	
TOTAL CREDITS = 10	TOTAL CREDITS = 9	TOTAL CREDITS = 6
Year 4 Fall	Year 4 Spring	Year 4 Summer
705:703 Dissertation Research (6)	705:703 Dissertation Research (6)	Dissertation Research (3)
DEFEND PROPOSAL	DISSERTATION RESEARCH CREDITS MUST TOTAL MINIMUM OF 15 CREDITS	DEFEND DISSERTATION GRADUATE!!
DISSERTATION RESEARCH CREDITS MUST TOTAL MINIMUM OF 15 CREDITS		TOTAL PROGRAM CREDITS = 96

Student Advisement

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., the dissertation chair), it is not a requirement. The academic advisor may or may not become the dissertation chairperson, depending upon the student and the advisor's preferences. If the academic advisor does not become the dissertation chairperson, the academic advisor will serve as the student's primary 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 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. The Dissertation Chairperson is selected and/or finalized no later than upon the student's satisfactory completion of the Qualifying Examination. See page 30 for a description of the responsibilities of the Dissertation Chairperson.

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 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 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 faculty. In many instances, this would be the same person).

The student works closely with a mentor who is a PhD-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 the 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. Students should engage in as many phases of the research process as possible.

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 School of Nursing 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 dissertation committee.

Important Academic Policies

The Ph.D. in Nursing Program is governed by policies issued by the School of Nursing and the Graduate School – Newark. Therefore, students should familiarize themselves with the academic policies of the Graduate School-Newark that are delineated in the Graduate School-Newark Student Handbook and the School of Nursing by visiting the following websites:

- https://cb4b81f6-588c-4b96-bf46-828f7b363e9d.filesusr.com/ugd/0d8f1a_484984819caa4ff38bd720c9a13af8fa.pdf
- <https://nursing.rutgers.edu/students/catalog/>

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

- **Transfer Credit:** http://catalogs.rutgers.edu/generated/nwk-grad_current/pg43.html
 - Can request credits for transfer after completing 12 credits at SON/Rutgers with a grade of B or better.
 - Can only transfer courses for which a B or better was received
 - 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://cb4b81f6-588c-4b96-bf46-828f7b363e9d.filesusr.com/ugd/29e3b2_4c7a2dc1a4294a49b0e5494a081a2e3c.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 Enrollment/Matriculation Continued:** Continuous registration including Matriculation Continued must be maintained until all degree requirements are completed. Please refer to the Graduate School-Newark Student Handbook for the description of this policy.
- **Leave of Absence: See Policy:** https://cb4b81f6-588c-4b96-bf46-828f7b363e9d.filesusr.com/ugd/0d8f1a_d70727f6779c459bb2a8bc82f91ee924.pdf. 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 medical reasons, family or dependent care, military service, or personal reasons. To request a leave of absence, the student should:
 - Meet with the PhD program director to determine if a LOA is appropriate.

- Complete, sign, and submit the Leave of Absence form (https://cb4b81f6-588c-4b96-bf46-828f7b363e9d.filesusr.com/ugd/0d8f1a_7610078b70dc4336b2b6484f4981a455.pdf) and submit it to the PhD program director for approval. Medical documentation is required for a medical LOA.
- The approved form will be submitted to the GS-N Associate Dean for approval.
- Students wishing to return from the LOA must submit a Request to Return to Active Study form (https://cb4b81f6-588c-4b96-bf46-828f7b363e9d.filesusr.com/ugd/0d8f1a_6e0d71463934435cb6bec23b1c457c12.pdf) to the PhD program director for approval. The student may not register until the return to active study is approved.

International students who wish to request a LOA must consult with the Office of International Student & Scholar Services to clarify the immigration/Visa regulations that might impact the LOA. Please refer to the GS-N Student Handbook for the LOA Policy stipulations.

- **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 (http://catalogs.rutgers.edu/generated/nwk-grad_current/pg56.html).
- **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). The student has one calendar year (12 months) in which to make up the work and have the professor submit a Change of Grade in REGIS noting the new grade. If this arrangement is worked out, the student should not register for the course again, even if the student needs to sit in on the course the next semester it is offered. The original registration will be sufficient and only a Change of Grade request needs to be submitted when the work is completed. Once a permanent grade is assigned, it is considered final.

Any student incurring grades of Incomplete (IN) will be held to the limit of one year (12 months) for completion of the course. If an IN grade is not changed within the one-year time limit, the course is abandoned and credits are not applied towards the total program credits completed. ("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 on their records.) Requests for waiver of this one-year limit must be made by the student, recommended by the course instructor, and the Ph.D. Program Director, and approved by the Office of the Dean. This waiver should be sought before the one-year expiration date. It will not be routinely granted. At this time students must submit any pertinent documentation that supports their request. Students who have more than one IN 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." Responsibility for the monitoring of this process resides with the graduate programs.

- 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) using Rutgers Connect (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>. 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 Graduate School-Newark policy prohibiting sexual harassment, sexual violence, stalking, and related misconduct can be found at http://catalogs.rutgers.edu/generated/nwk-grad_current/pg73.html
- 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 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 Qualifying Examination, comprised of a written and oral component, is designed to determine whether a student has acquired enough mastery of core course content to warrant admission to candidacy for the Ph.D. degree. The Qualifying Examination process has been designed to: 1) strengthen students' abilities to critically analyze and synthesize the available literature concerning their research topic; 2) improve students' written and oral presentation skills related to their research topic; and 3) promote a seamless transition from coursework to the dissertation and reduce the amount of time to program completion. Thus, the three Qualifying Examination Papers, as the written component of the Qualifying Examination, are designed to prepare the student to develop and defend their dissertation research proposal. The purpose of this detailed procedure is to provide clear guidelines to students and faculty regarding the Qualifying Examination process.

Rationale:

To provide clear guidelines to students and faculty when planning for the Qualifying Examination. Each of the three Qualifying Examination Papers must be focused on the same phenomenon/concept of interest that is to be the core of the student's dissertation research. With this unifying theme and a thorough synthesis of the literature, the Qualifying Examination Papers will coalesce to address an important area of nursing science. The oral component of the Qualifying Examination is designed, primarily, to evaluate the student's 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.

Requirements:

The Qualifying Examination, comprised of a written and oral component, must be taken after the student has satisfactorily completed the following required courses: 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 Qualitative or Advanced Quantitative Methods. All "incomplete" grades must be removed or abandoned from the student's permanent transcripts before completing the examination. The Qualifying Examination will normally be completed during the Spring semester following the conclusion of the Advanced Qualitative or Advanced Quantitative course.

Procedure

1. Early in the fall semester after admission, students should meet with their assigned academic advisor to discuss options for the selection of a Qualifying Examination Committee. The Qualifying Examination Committee will be composed of three School of Nursing faculty, including the student's advisor. While the advisor will often assume the future role of Dissertation Chairperson, and Qualifying Examination Committee members will often assume the role of Dissertation Committee members, this may not always be the case. Note that the student's advisor and/or the future Dissertation Chairperson can be a member but cannot serve as the Chairperson of the Qualifying Examination Committee.

2. Prior to the 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 Ph.D. Program Director/Assistant Dean of Nursing Science. The Chair of the Qualifying Examination Committee is responsible for coordinating all aspects of the qualifying exam including consulting with committee members regarding the assignment of “lead” members for each paper, scheduling the date for submission of the final papers, contacting the Division of Nursing Science Administrative Assistant to schedule the oral examination, and coordinating the grading process and submission of exam grades to the Assistant Dean, Nursing Science.
3. The written component of the Qualifying Examination consists of three Papers, pertaining to 1) theory 2) review of the literature and 3) methodology. Each paper is related to the student’s area of focus. In the event that there is not a good fit between these categories and the student’s phenomenon of interest/area of science (e.g. the phenomenon/area of science is emerging and there is a lack of extant theory to review as in qualitative, theory-generating dissertations) then the nature of the Paper can be negotiated with the Chair of the Qualifying Examination Committee.
4. Each of the three Qualifying Examination Papers must be focused on the same phenomenon/concept of interest that is to be the core of the student’s dissertation research. The papers should synergistically coalesce to address this phenomenon of importance to nursing science. They should be publishable quality manuscripts/papers, although they do not need to be accepted or even submitted for publication. Because these papers will build on work completed each semester, it is important the students begin the process of preparation early.
5. It is expected that students will begin preparation of the Qualifying Examination Paper in consultation with members of their Qualifying Examination Committee, as they progress through the coursework. The three Qualifying Examination Papers can be revisions of written assignments submitted during coursework. A wrap-around addition to a manuscript may be necessary in order to meet the rubric requirements of the Paper.
6. It is anticipated that each Committee member will take the lead on providing feedback on one initial draft of a Qualifying Examination Paper. Before submitting the final version of the Papers, the student may submit one draft of each paper to the “lead” faculty member for the respective papers for review and feedback, based on the rubric requirements for the paper. The student should receive written feedback within approximately 3 weeks after receipt of the draft. The lead faculty member will also share the written feedback with the other members of the committee.
7. Although Committee members provide advice and guidance to the student on their draft, the papers should reflect the student’s own work.
8. Each of the three Qualifying Examination Papers should be no more than 12-15 pages in length (exclusive of references and title page), be double-spaced, and adhere strictly to APA style formatting. Only the Review of the Literature Qualifying Examination Paper should include an Appendix, in the form of a required evidence table. In preparing the

three focusing papers, students are expected to strictly adhere to the Rutgers University Academic Integrity Policy.

9. 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 three Qualifying Examination Papers 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 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 Academic Calendar. In the unlikely event that the oral examination does not occur during the Spring semester, the Qualifying Examination Papers must be submitted at least four weeks prior to the date of the oral examination.
10. Using the approved rubric, each final paper will be reviewed and graded by members of the Qualifying Examination Committee as either Pass (score of 79.49 or above) or Fail (score less than 79.49). To receive a grade of “Pass”, a majority of the Committee members (e.g. 2 of 3) must agree on the grade of Pass.
11. The Chair of the Examination Committee will be responsible for coordinating the grading process which includes collecting grades from each member of the Committee, determining if there is sufficient consensus for either a “Pass” or “Fail” (see #10 above), completing the Qualifying Examination Grade Form, which serves as a record of the grades, and informing the student and the Ph.D. Program Director of the Committee’s decision.
12. The student must receive a grade of “Pass” on all three Qualifying Examination Papers (see #10) to progress to the oral component of the examination. If the Committee renders a grade of “Fail” on a Focusing Paper(s), he/she will receive written feedback, based on the rubric requirements for the failed paper(s), from the Chairperson or lead faculty member. The student has one opportunity to formally resubmit the paper(s) for grading. The resubmitted Qualifying Examination Paper(s) must be received by the Committee 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 one or more Qualifying Examination Papers, the student will be dismissed from the Ph.D. in Nursing program.
13. The oral component of the examination consists of questions from the Committee about any aspect of the three papers or other relevant core content within the Ph.D. program curriculum. The oral examination assesses the student’s ability to communicate their knowledge about the phenomenon of interest effectively in a verbal presentation. 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” the student 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.

14. Like the process used in grading the written component of the Qualifying Examination, the Chair of the Examination Committee will be responsible for coordinating the Committee's determination of a Pass or Fail on the oral component of the exam. 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 (see #13), will complete the Qualifying Examination Grade Form, and obtain signatures from all Committee members. 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.
15. In the event of outstanding performance on the written and oral components of the Qualifying Examination, the Committee may elect to award a grade of Pass with Distinction. This determination is at the sole discretion of the Committee and will be made during the deliberations as explained above.
16. Upon the student's successful completion of the Qualifying Exam, the Chair of the Qualifying Examination Committee is responsible to ensure that the Examination Grade form is completed and submitted to the **Administrative Coordinator in the Office of Nursing Science**.

Theoretical framework paper: RUBRIC: This paper provides a critical examination of theories and conceptual models that have been used in the student’s topic of interest, and how they specifically explain the phenomenon at large, the variables of interest, and the way the variables relate to each other. This paper should also address how these theories have been used in other studies and why they would be useful in understanding the phenomenon of interest. Most importantly, this paper should discuss how the various theoretical frameworks could be integrated to inform research on the topic of interest.

Criterion	5 Points	4 Points	3 Points	2 Points	0 Points
The concept / phenomenon of study is clearly introduced, defined, and relevance to nursing / healthcare is briefly summarized.	Concept/ phenomenon is clearly and fully introduced and defined, and relevance to nursing and/or healthcare is clearly summarized	Concept/phenomenon is clearly and fully introduced and defined but relevance to nursing / healthcare is weak	Concept/phenomenon not clear or not fully introduced but relevance to nursing and/or healthcare is clearly summarized	Concept/phenomenon is superficially introduced and defined and relevance to nursing and/or healthcare is weak	Not addressed
	25 Points	20 Points	15 Points	10 Points	0 Points
Pertinent theories that describe and/or explain the concept are examined and presented. How each theory specifically describes and explains the concept / phenomenon is presented.	Pertinent theories are examined and presented. Clear theoretical and operational definitions of relevant concepts in each theory are provided. Fully presents how each theory describes and /or explains the student’s concept/ phenomenon of interest (relevance).	Concepts in each theory are identified, theoretical and operational definitions of relevant concepts in each theory are provided, but the relevance of the theory to the student’s concept/phenomenon of interest is weak.	Concepts in each theory are identified but the theoretical or operational definitions of concepts are weakly defined or not defined.	Concepts in each theory are minimally identified, defined, and relevance of the theory to the student’s concept/phenomenon of interest is weak.	Not addressed
	25 Points	20 Points	15 Points	10 Points	0 Points
The relevant propositions (non-directional and directional) from each pertinent theory, as specified, are presented. If directional, the direction between variables is specified (e.g. inverse relationship, positive relationship).	Relevant propositions (non-directional and directional) from each of the presented theories are clearly explained. Directional propositions are clearly specified.	Relevant propositions (non-directional and directional) from each of the presented theories are clearly explained. Specification of directional propositions is weak or unclear.	Not all relevant propositions from each of the presented theories are identified. Specification of directional propositions is incomplete/or poorly explained.	Not all relevant propositions from the identified theories are presented. Directional propositions are not identified and/or not specified.	Not Addressed

Theoretical framework paper: RUBRIC (continued)

Criterion	25 Points	20 Points	15 Points	10 Points	0 Points
Describes how the pertinent theories, as specified, have been used in other studies including as appropriate, the propositions that have been tested and relevant propositions that have not been tested. Describes how the theories are useful in understanding the phenomenon of interest.	Presents quantitative and qualitative studies as appropriate, and clearly describes how the pertinent theories, as previously specified, have been used in these studies including as appropriate, the propositions that have been tested and relevant propositions that have not been tested. Fully describes how the theories are useful in understanding the phenomenon of interest.	Presents quantitative and qualitative studies as appropriate. However, either only (1) partially describes how the pertinent theories, as previously specified, have been used in these studies or (2) only partially describes how the theories are useful in understanding the phenomenon of interest.	Presents some studies that are relevant to pertinent theories, as previously specified, but the review of the literature is weak and does not represent the state of the science. Description of how the theories are useful in understanding the phenomenon of interest is weak.	Studies are presented that did not apply or test the pertinent theories as previously specified. Description of how the theories are useful in understanding the phenomenon of interest is missing or weak.	Not addressed.
	15 Points	13 Points	8 Points	4 Points	0 Points
Describe how these various theories / frameworks can be integrated to inform further research.	Fully describes how appropriately selected relational and/or non-relational propositions from the previously specified theories can be linked to develop a synthesized, integrated theoretical framework that informs further research related to phenomenon of interest.	Fully describes how selected relational and/or non-relational propositions from the previously specified theories can be linked to develop a synthesized, integrated theoretical framework but application to further research related to concept / phenomenon of interest is either superficial or lacks clarity.	Fully describes how selected relational and/or non-relational propositions from the previously specified theories can be linked to develop a synthesized, integrated theoretical framework but does not apply it to further research related to phenomenon of interest.	Partially describes how selected relational and/or non-relational propositions from the previously specified theories can be linked to develop a synthesized, integrated theoretical framework. Application to further research related to phenomenon of interest is superficial or lacks clarity.	Not addressed

Theoretical framework paper: RUBRIC (continued)

Criterion	5 Points	4 Points	3 Points	2 Points	0 Points
The writing style reflects clarity, precision, logical flow, correct grammar, 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; no spelling errors.	Mostly adheres to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar; no spelling errors.	Mostly adheres to APA format; the writing style is mostly clear, concise, and logical. Correct grammar, no spelling errors.	One of the following is noted: i1) Inconsistent adherence to APA format; (2) Writing style lacks clarity, precision, and/or logic; (3) Incorrect use of grammar or multiple spelling errors.	All of the following are noted: (1) Poor adherence to APA format; writing style (2) Writing style lacks clarity, precision, and/or logic; (3) Incorrect use of grammar and multiple spelling errors.

Literature review paper: RUBRIC The review should take a compare and contrast approach that considers the theoretical and operational conceptualization of the phenomenon as well as areas of controversy in the literature. Examples of strategies to present the content of the review include approaches such as topical theme, chronological, theoretical, methodological, or author’s conclusion. The paper provides a review and critical examination of preexisting work on the topic of interest. This paper should culminate in identified gaps in the literature and the knowledge base with respect to the phenomenon, as well as how the phenomenon relates to the research questions or hypotheses.

Criterion	10 Points	8 Points	6 Points	4 Points	0 Points
The phenomenon of interest is described and its importance to nursing science is presented and its relationship to the scientific problem is discussed.	The core phenomenon is defined. The phenomenon of interest includes the incidence and prevalence, and human suffering, and societal costs associated with the phenomenon are described. The relationship to the problem is succinctly identified and described.	The phenomenon is identified and defined. However, the extent of the problem (e.g. incidence, prevalence, suffering, costs) is not substantiated with current references. The discussion of the relationship to the problem is discussed.	The phenomenon is defined. However, the extent of the problem (e.g. incidence, prevalence, suffering, costs) is not sufficiently addressed. The relationship to the problem discussion is insufficient.	The phenomenon of interest presentation is vague. The nature of the relationship to the problem is not presented.	Not addressed
	25 Points	20 Points	15 Points	10 Points	0 Points
The approach to the literature review is stated and the synthesis of the literature follows logically. The synthesis includes comparisons and contrasts across chronology, topical themes, relevant theories, methodologies, or author’s conclusions.	The approach to the discussion is clearly articulated. Comparisons and contrasts are present and provide for easy discrimination across the chosen approach.	The approach to the discussion is clearly articulated. Comparisons and contrasts are present but lacking in sufficient depth to discriminate across the chosen approach.	The approach to the discussion is vague and not clearly articulated. Comparisons and contrasts are present but lacking in sufficient depth to discriminate across the chosen approach.	The approach to the discussion is not articulated. Comparisons and contrasts follow no logical approach in the discussion.	Not addressed
	30 Points	25 Points	15 Points	10 Points	0 Points
Integrated in the discussion or as part of the conclusion are major gaps in the literature, inconsistencies in theory and findings and suggestions of future study.	The review includes logical conclusions about gaps or inconsistencies, and these are linked with information presented in the review. Future studies are proposed and linked to the problem noted in the introduction.	The review includes logical conclusions about gaps or inconsistencies, and these are linked only partially with information presented in the review. Future studies are proposed and linked to the problem noted in the introduction.	The review includes logical conclusions about gaps or inconsistencies, and these partially linked with information presented in the review. Future studies are not linked to the problem noted in the introduction.	The review includes partially logical conclusions about gaps or inconsistencies, and these are not linked with information presented in the review. Future studies are not linked to the problem noted in the introduction.	The review includes illogical conclusions about gaps or inconsistencies, and these are not linked with information presented in the review. Future studies are not linked to the problem noted in the introduction.

Literature review paper: RUBRIC (Continued)

Criterion	30 Points	25 Points	15 Points	10 Points	0 Points
The review concludes with the major contributions of significant studies with a focus on the problem identified in the introduction. A table of evidence is presented.	The review concludes with the major contributions of significant studies aligned with a focus on the problem identified in the introduction. A table of evidence is presented.	The review concludes with the contributions of significant studies that are partially aligned with the problem identified in the introduction. A table of evidence is presented.	The review concludes with the contributions of significant studies that are partially aligned with the problem identified in the introduction. A table of evidence is presented but lacking in depth.	The review concludes with the contributions of studies that have some alignment with the problem identified in the introduction. A table of evidence is presented but lacking in depth.	The review concludes with studies that are poorly aligned with a focus on the problem identified in the introduction. A table of evidence is presented either not included or severely lacking in depth.
	5 Points	4 Points	3 Points	2 Points	0 Points
The writing style reflects clarity, precision, logical flow, correct grammar and is free of spelling errors. APA format for headings, citations, and references	Strict adherence to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar; no spelling errors.	Mostly adheres to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar; no spelling errors.	Mostly adheres to APA format; the writing style is mostly clear, concise, and logical. Correct grammar, no spelling errors.	One of the following is noted: i1) Inconsistent adherence to APA format; (2) Writing style lacks clarity, precision, and/or logic; (3) Incorrect use of grammar or multiple spelling errors.	All the following are noted: (1) Poor adherence to APA format; writing style lacks clarity, precision, and/or logic. Incorrect use of grammar and multiple spelling errors.

Methods paper: RUBRIC This paper provides a literature review of the methods that have been used in examining the topic of interest. It is a critical examination of the methodologies, including both quantitative and qualitative designs, sampling, and data analysis methods. For quantitative designs, students should discuss rigor, including reliability and threats to validity (internal, external, construct, and statistical conclusion). In addition, students need to address measurement issues and critique specific instruments that have been used to measure the phenomenon of interest. For qualitative designs, students should discuss the rigor and trustworthiness (e.g., credibility, authenticity, thick description, reflexivity, triangulation, member checking, audit trail, transferability, etc.). When discussing sampling in the studies being critiqued, students need to address sampling frame, sampling procedures, sample size, and response rates as appropriate, that have been used in studies to examine the phenomenon of interest in both quantitative and qualitative approaches.

Criterion	10 Points	8 Points	6 Points	4 Points	0 Points
A review of qualitative methods that have been used to examine the phenomenon of interest is described and critiqued. Need to address: -Design -Sampling -Rigor	Methods used in qualitative designs are fully critiqued, including credibility, authenticity, thick description, reflexivity, triangulation, member checking, audit trail, and transferability. Weaknesses and gaps in previously used methods, as appropriate, are identified.	Methods used in qualitative designs are only partially critiqued in that indicators of either design, sampling or rigor are not fully addressed. Weaknesses and gaps in previously used methods, as appropriate, are not fully identified.	Methods used in qualitative designs are inadequately critiqued in that neither two indicators of design, sampling, or rigor are fully addressed. Weaknesses and gaps in previously used methods, as appropriate, are identified.	Methods used in qualitative designs are inadequately critiqued in that neither the indicators of design, sampling, nor rigor are fully addressed. Moreover, weaknesses and gaps in previously used methods, as appropriate, are not identified.	Not addressed
	30 Points	25 Points	15 Points	10 Points	0 Points
Describe and critique specific instruments that have been used to measure the phenomenon of interest. Identify those developed from qualitative research. If no measures exist for a phenomenon, critique an instrument for a similar phenomenon of interest.	Specific instruments are adequately critiqued. The critique includes face validity, content validity, criterion-related validity, construct validity, reliability, and sampling. Strengths and weaknesses of the instruments are summarized.	Specific instruments are critiqued, but the critique does not address one or two indicators of reliability and validity. Strengths and weaknesses of the instruments are summarized.	Specific instruments are inadequately critiqued in that the critique does not address several indicators of reliability and validity. Strengths and weaknesses of the instruments are summarized.	Specific instruments are inadequately critiqued in that the critique does not address several indicators of reliability and validity. Strengths and weaknesses of the instruments are not summarized.	Not addressed

Methods paper: RUBRIC (continued)

Criterion	30 Points	25 Points	15 Points	10 Points	0 Points
A review of quantitative methods that have been used to examine the phenomenon of interest is described and critiqued. Need to address: -Design -Measurement -Sampling -Rigor	Methods used in quantitative designs are fully critiqued, including the relevancy of design, appropriate sample, and data analysis. Weaknesses and gaps in previously used methods, as appropriate, are identified.	Methods used in quantitative designs are only partially critiqued in that threats to internal and external validity are superficially discussed. Weaknesses and gaps in previously used methods, as appropriate, are not fully identified.	Methods used in quantitative designs are inadequately critiqued; either threats to internal validity or threats to external validity are not addressed. Weaknesses and gaps in previously used methods, as appropriate, are not fully identified.	Methods used in quantitative designs are superficially presented and neither threats to internal nor external validity are addressed. Weaknesses and gaps in previously used methods are not fully identified.	Not addressed
	25 Points	20 Points	15 Points	10 Points	0 Points
Given the gaps in knowledge and methods used to examine the phenomenon of interest thus far, discuss what methods might be useful to better understand the phenomenon and move the science forward and why you think they would be useful.	Thoughtful, in-depth discussion of the potentially useful method(s) and clear justification for why they could be useful to enhance our understanding of the phenomenon of interest.	In-depth discussion of the potentially useful method(s) but a justification for use of these methods not clearly addressed.	Discussion of the potential method(s) addressed but not in-depth and justification for the usefulness inadequately addressed.	Superficial discussion of potential methods, the justification for the method(s) not addressed.	Not addressed.
	5 Points	4 Points	3 Points	2 Points	0 Points
The writing style reflects clarity, precision, logical flow, correct grammar and is free of spelling errors. APA format for headings, citations, and references	Strict adherence to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar; no spelling errors.	Mostly adheres to APA format; the writing style is consistently clear, concise, and logical. Consistent use of correct grammar; no spelling errors.	Mostly adheres to APA format; the writing style is mostly clear, concise, and logical. Correct grammar, no spelling errors.	One of the following is noted: i1) Inconsistent adherence to APA format; (2) Writing style lacks clarity, precision, and/or logic; (3) Incorrect use of grammar or multiple spelling errors.	All 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 multiple spelling errors.

Rutgers, The State University Of New Jersey

SCHOOL OF NURSING

QUALIFYING EXAMINATION COMMITTEE FORM– Ph.D. IN NURSING PROGRAM

Directions: Follow the guidelines for selection of the Qualifying Examination Committee described in the Ph.D. Program in Nursing Handbook for Students. Submit this form to the Ph.D. Program Director after all signatures of the Qualifying Examination Committee are obtained.

Doctoral Student Name: _____
Last First MI

Semester in which the Qualifying Examination papers will be submitted, and oral examination will occur:
Year: _____ Semester: _____

QUALIFYING EXAMINATION COMMITTEE MEMBERS:
SCHOOL OF NURSING:

Chairperson (typed/printed) Chairperson (signature) Date

Member (typed/printed)

Member (typed/printed)

Reviewed and filed by:

Director, Ph.D. in Nursing Program Date _____

Rutgers, The State University Of New Jersey
SCHOOL OF NURSING
QUALIFYING EXAMINATION GRADE FORM- PHD IN NURSING PROGRAM

The members of the Qualifying Examination Committee of

Student's Name

have graded the component(s) of the Qualifying Examination as indicated below. Reaching consensus (majority), the Committee certifies the following decision(s):

EXAM COMPONENT	PASS	FAIL	DATE	COMMENTS
Focusing Paper: Theory				
Focusing Paper: Review of the Literature				
Focusing Paper: Methods				
Oral Examination				

 Name of Chair (Print)

 Chair's signature

 Date

 Name of Member (Print)

 Member's signature

 Date

 Name of Member (Print)

 Member's signature

 Date

 Reviewed and filed by:

 Director, PhD in Nursing Program

 Date: _____

NOTE: The components of the Qualifying Examination are to be submitted by the student and graded by the Committee prior to the end of the semester in which the Qualifying Examination was scheduled to occur. This form is to be completed and given to the Director, PhD in Nursing Program within 10 days of the Committee's **Final** Grading Decision.

DOCTORAL DISSERTATION

Overview

Each candidate for the doctorate 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 candidate 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 are listed below:

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

HSPP Toolkit <https://orra.rutgers.edu/hspp-toolkit>

Student Handbook: A guide to human subjects protection in research

<https://orra.rutgers.edu/sites/orra.rutgers.edu/files/HSPP/HRP-105%20Student%20Handbook%20v12.1.16.pdf>

Policy

1. The dissertation committee is officially constituted after the student passes the qualifying examination for admission to candidacy.
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 candidate 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 appointed by the Director of the Ph.D. Program.
3. Selection of the Dissertation Committee:
 - a. Criteria for Dissertation Chairperson
 - i. A member of the faculty of the School of Nursing
 - ii. Holds graduate faculty status in the School of Graduate Studies
 - iii. Has earned a research doctoral degree (e.g., Ph.D., DNSc, EdD)
 - iv. Has research experience and expertise related to some important aspect of the dissertation
 - v. Is available to the candidate on a regular basis during the dissertation phase
 - b. Criteria for Committee Members
 - i. Three 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. The Dissertation Committee consists of four members: A Chairperson, two SON

Doctoral Dissertation: policy (continued)

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 candidate has submitted a specific area of inquiry or a beginning research problem which the candidate has identified.
- ii. The faculty member who accepts the role of chairperson becomes the candidate's academic and research advisor.
- iii. The chairperson will serve as the principal investigator for the student'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 candidate'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 Assistant to schedule the dissertation proposal defense meeting and the public dissertation defense.

5. Committee Member Responsibilities

- a. Be available to meet with the candidate; critique drafts of the developing dissertation proposal;
- b. Participate actively in the committee meeting(s) on the dissertation proposal
- c. Review drafts of the final dissertation, and the final dissertation product; and
- d. Share critique and concerns with the student and the chairperson.
- e. Participate actively in the conduct of the dissertation defense and vote on the decision regarding pass/fail.

6. Responsibilities of the Candidate

- a. The candidate 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 "Thesis and Dissertation Form" available in the Graduate School-Newark Office of the Dean (<https://etd.libraries.rutgers.edu/login.php>). The chairperson shall not accept the dissertation if these standards have not been met.
- b. The candidate 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 on 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.

7. Dissertation Credit Registration Process
 - a. The candidate should register for dissertation credits upon advisement of the Dissertation Chairperson; and,
 - b. The candidate 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 18 hours of dissertation credits.

**PLEASE GO TO <https://www.gsn.newark.rutgers.edu/phd>
FOR THE LATEST VERSIONS OF REQUIRED FORMS AND DEADLINE DATES
INCLUDING:**

Doctoral Requirement and Deadlines
Dissertation Defense Report and Forms

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) except where this publication differs from the directions for dissertations distributed by the Graduate School-Newark in the pamphlet: "Thesis and Dissertation Form." Where discrepancies occur, the Graduate School-Newark instructions are to be followed.
 - c. The dissertation proposal should not exceed 50 pages, 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. Inclusion of the target sample is optional.

Dissertation Proposal: policy (continued)

2. Dissertation Proposal Defense Meeting

- a. The candidate, 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 candidate 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, 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 Administrative Coordinator, Office of Nursing Science, 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 candidate 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 (sample in Appendix C). 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.

Dissertation Proposal: policy (continued)

- b. 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. In addition, 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:
 - i. Communicate with the Committee Chair before submitting any research grants to fund all or part of dissertation research.
 - ii. Communicate with the Committee Chair before submitting any abstracts for conferences or publications that will report dissertation findings.
 - iii. Communicate with the Chair of Committee before submitting to the public domain any materials that are an integral component of the dissertation.
 - iv. 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 Graduate School-Newark website the “Style Guide for Doctoral Dissertation Preparation” at https://docs.wixstatic.com/ugd/0d8f1a_249fafb0629248cc95014efca274f722.pdf 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.

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.

- 2. Title Page**
- 3. Copyright Page (copyrighting is optional)**
- 4. Acknowledgments**
- 5. Table of Contents**
- 6. List of Tables**
- 7. 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

DISSERTATION OUTLINE AND COMPONENTS: GUIDE FOR QUANTITATIVE STUDY (continued)

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 COMPONENT OUTLINE: 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

TRADITIONAL DISSERTATION COMPONENT OUTLINE: GUIDE FOR QUALITATIVE INQUIRY(Continued)

CHAPTER III. METHODS

In Support of Method

Description of the Setting(s)

Characteristics of the Participants

Protection of Human Subjects

Data Source and Collection

Data Analysis

Trustworthiness

CHAPTER IV. CONTEXT AND INFORMANTS

Historical and Sociocultural Context of the Research

Introduction to the Participants

Description of the Audit Trail

CHAPTER V. DESCRIPTION AND DISCUSSION OF THEMES

Major Theme

Related Themes

Sub-Themes

Meanings Inherent in the Theme(s)

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 GS-N. 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 explain 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.

DISSERTATION DEFENSE AND SUBMISSION OF THE COMPLETED DISSERTATION

The final draft of the dissertation should be prepared in strict adherence with the Graduate School-Newark Electronic Doctoral Dissertation Guide and Preparation for Upload available at https://docs.wixstatic.com/ugd/0d8f1a_249fafb0629248cc95014efca274f722.pdf

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 successfully 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, Graduate School-Newark on or before the published deadline date. This may be facilitated by the Dissertation Chairperson. The Dissertation Committee Chairperson and members, as well as the Ph.D. Program Director must sign the Graduate School-Newark Dissertation Defense Report (available at <https://www.gsn.newark.rutgers.edu/dissertationdefensephilosophy>) and the title page of the dissertation. The student must also complete the Doctoral Dissertation Academic History form (available at <https://www.gsn.newark.rutgers.edu/dissertationdefensephilosophy>). The signed Dissertation Defense Report Form and Dissertation title page and the Academic History Form must be submitted by the student to the Graduate School-Newark according to instructions and deadlines stipulated.

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://docs.wixstatic.com/ugd/0d8f1a_249fafb0629248cc95014efca274f722.pdf). 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://etd.libraries.rutgers.edu/login.php>, for permanent record according to instructions for doctoral candidates on the Graduate School-Newark website (<https://www.gsn.newark.rutgers.edu/phd>).

APPLICATION FOR THE CONFERRAL OF THE DEGREE

The candidate must file an online diploma application with the Graduate School-Newark (available at <https://grad.admissions.rutgers.edu/Diploma/Login.aspx?ReturnUrl=%2fDiploma>) according to announced deadlines specified in the Graduate School-Newark Student Handbook, available at https://docs.wixstatic.com/ugd/0d8f1a_2a1122f94c7d490781ec3bc0b0e64fa9.pdf, in order to receive a diploma at commencement. For students completing the defense at any time other than April/May, certification of completion is issued upon request. Awarding of diplomas and the hooding ceremony occur at the School of Nursing and Graduate School-Newark graduation ceremony in May of each year.

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 concerning copyright, embargo requests for online publication of the dissertation, and ProQuest publication services is available in the Electronic Doctoral Dissertation Guide for Publication and Upload (available at https://docs.wixstatic.com/ugd/0d8f1a_249fafb0629248cc95014efca274f722.pdf)

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 of 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.

* 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*

* 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

* 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 instrument 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 specify changes in nursing practice that should emanate from the study results, policy implications, and directions for further research.

APPENDIX B - SAMPLE CANDIDACY FORM



GRADUATE SCHOOL-NEWARK
*Application for Admission to Candidacy
for the Degree of Doctor of Philosophy*

To the student: This application form is to be used on two occasions, first at the time you take your qualifying examination, and again at the time of your final examination.

You should complete the first page of this form and present it to the chairperson of your committee at the time of your qualifying examination. After the members of your committee have signed it, return it to the dean's office, preferably in person rather than by mail.

On the day of your final examination, collect this form from the dean's office and carry it with you to the place of the examination to obtain the signatures of the members of your dissertation committee.

Please read the italicized instructions elsewhere on this application and familiarize yourself with all requirements for graduation.

Name
Last First Middle

Address
.....

Email Address RUID#

Graduate program in which you are enrolled

I apply for admission to candidacy for the degree of Doctor of Philosophy.

Date Signature of applicant

PART I

Qualifying Examination Committee Report

A. We recommend that be admitted to candidacy.

(PRINT NAME)

(SIGNATURE)

Program Director

Chairperson

Committee Members

..... ..

..... ..

Date..... .. Date..... ..

B. We recommend that ***not*** be admitted to candidacy. The chairperson of this committee shall summarize the committee recommendations in a letter to the applicant and shall forward a copy to the dean's office **within three days of the examination**.

(PRINT NAME)

(SIGNATURE)

Program Director

Chairperson

Committee Members

..... ..

..... ..

Date..... .. Date..... ..

To the student: Before you return this form to the dean's office, please note the following: you must collect this form again at the time of your final examination; you must maintain continuous registration until that date, and you must file a separate DIPLOMA APPLICATION several weeks or months before your anticipated date of graduation (see Graduate School-Newark for graduation deadline dates).

APPENDIX C: DISSERTATION COMMITTEE FORM– PHD PROGRAM

**Rutgers, The State University Of New Jersey
SCHOOL OF NURSING
DISSERTATION COMMITTEE FORM– Ph.D. PROGRAM**

Directions: Follow the guidelines for selection of the Dissertation Committee described in the Ph.D. Program in Nursing Handbook for Students. Submit this form to the Graduate Program Director after all signatures of the Dissertation Committee are obtained.

Doctoral Student Name: _____
Last First MI

Dissertation Topic: _____

DISSERTATION COMMITTEE:

SCHOOL OF NURSING:

Chairperson (*typed/printed*) _____
Chairperson (*signature*) _____
Date

Member (*typed/printed*) _____
Member (*signature*) _____
Date

Member (*typed/printed*) _____
Member (*signature*) _____
Date

NON-NURSING COLLEGE/DEPARTMENT:

Member (*typed/printed*) _____
Member (*signature*) _____
Date

Reviewed and approved by:

Associate Dean Nursing Science _____
(*typed/printed*) Associate Dean/Nursing Science _____
(*signature*) Date

APPENDIX D: DISSERTATION PROPOSAL APPROVAL FORM

**Rutgers, The State University Of New Jersey
SCHOOL OF NURSING: Ph.D. PROGRAM IN NURSING
DISSERTATION PROPOSAL APPROVAL FORM**

The members of the dissertation committee of _____
Student's Name

Have met and agreed that the proposal, _____
Title

has sufficient merit for the study to be conducted.

Name of Chair (*Print*) Chair's signature Date

Name of Member (*Print*) Member's signature Date

Name of Member (*Print*) Member's signature Date

Name of Member (*Print*) Member's signature Date

NOTE: This form is to be completed and given to the Associate Dean for Nursing Science/Ph.D. Program within 10 days of the Committee Approval Meeting. Append one (1) copy of the full proposal with this form.

Date Received: _____

APPENDIX E: DISSERTATION DEFENSE FORM

Rutgers, The State University Of New Jersey SCHOOL OF NURSING: Ph.D. PROGRAM IN NURSING



Dissertation Defense Report for the Degree of Doctor of Philosophy

To the student: Present this form to your committee at the time of your final examination. Your committee must also sign the title page of your dissertation after they have certified your passage of the final examination and after they are satisfied that the dissertation meets their requirements. You must then seek the authorization of your graduate program director below and return this form to the Graduate School-Newark office.

Title of dissertation _____

To the faculty: Please sign section A or B below.

A. We certify that _____ passed the dissertation defense.

Date _____

PRINT NAME BELOW

SIGNATURES BELOW

Committee Chairperson _____

Committee Members _____

B. We certify that _____ did **not** pass the dissertation defense.

The chairperson of this committee shall summarize the committee recommendations in a letter to the candidate and shall forward a copy to the Graduate School-Newark office **within three days of the examination.**

Date _____

PRINT NAME BELOW

SIGNATURES BELOW

Committee Chairperson _____

Committee Members _____

Report to the Graduate Program Director

I certify that the candidate has satisfied all the program requirements for the Doctor of Philosophy Degree.

Date _____ Graduate Program Director _____

Report to the Dean

I report to the Graduate Faculty that the candidate has completed all the requirements for the degree of Doctor of Philosophy and advise that the candidate be recommended to the Board of Governors for this degree.

Date _____ Graduate School Dean _____

<http://gsn.newark.rutgers.edu>

APPENDIX F: CURRICULUM TRACKING SHEET

PH.D. PROGRAM PLAN

SCHOOL OF NURSING

NAME: _____

CURRICULUM TRACKING SHEET

DATE OF ADMISSION: _____

	<u>Credits</u>	<u>Towards Ph.D.</u>	<u>Semester /Year</u>
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		_____
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 Methods	4 credits		_____
Nursing Cognate	3 credits		_____
Cognate in other discipline _____	3 credits		_____
Cognate in other discipline _____	3 credits		_____
Dissertation Seminar	3 credits		_____
Dissertation Research	15 credits		_____

TOTAL:

66 credits minimum

Other _____

Other _____

APPENDIX G: PLAN OF STUDY: PLANNING SHEET

Student Name _____

Fall Semester Yr. 1	CR	Spring Semester Yr. 1	CR	Summer Yr. 1	Total
Subtotal credits		Subtotal credits			
Fall Semester Yr. 2	CR	Spring Semester Yr. 2	CR	Summer Yr. 2	Total
Subtotal credits		Subtotal credits			
Fall Semester Yr. 3	CR	Spring Semester Yr. 3	CR	Summer Yr. 3	Total
Subtotal credits		Subtotal credits			
Fall Semester Yr. 4	CR	Spring Semester Yr. 4	CR	Summer Yr. 4	Total
Subtotal credits					
Total Minimum Credits = 66					

APPENDIX H

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