NURSING

400 West Campus Drive, 203.785.2389  
http://nursing.yale.edu/academics/doctor-philosophy-phd  
M.Phil., Ph.D.

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FIELDS OF STUDY
Fields include chronic illness (diabetes, cardiovascular disease, cancer, HIV/AIDS); self- and family management; maternal and child health; sleep and sleep disorders; global health; health equity and care of vulnerable populations; acute and critical care; end-of-life and palliative care; genetic and environmental influences on health; gerontology and long-term care; and school- and community-based interventions.

SPECIAL ADMISSIONS REQUIREMENTS
Applicants should have a master’s degree in nursing, or the equivalent, including previous course work in statistics and graduate-level course work in research methods. The Graduate Record Examination (GRE) General Test is required. The Test of English as a Foreign Language (TOEFL) is required of all applicants for whom English is a second language. Samples of written work (e.g., published article, thesis, literature review) and a curriculum vitae are required. Qualified applicants will be invited for an interview with a member of the doctoral faculty.

SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE

Course Work
Completion of fourteen core courses and four cognates in the student’s area of specialization (including one advanced analysis course) is required. Successful completion of the dissertation seminar (NURS 906 in the fall and NURS 907 in the spring) every term for years 1–4 is also required. The required core courses are: NURS 901, Research Methods I: Quantitative Methods for Health Research; NURS 902, Research Methods II: Qualitative Methods for Health Research; NURS 903, Research Methods III: Measurement of Health Variables; NURS 904, Research Methods IV: Mixed Methods; NURS 905, Research Methods V: Intervention Development; NURS 908, Science, Scholarship, and Communication of Knowledge I; NURS 909, Science, Scholarship, and Communication of Knowledge II; NURS 910, Science, Scholarship, and Communication of Knowledge III; NURS 911, Science, Scholarship, and Communication of Knowledge IV; NURS 912, Foundations of Scientific Inquiry I: Theoretical Basis for Nursing Science; NURS 913, Foundations of Scientific Inquiry II: Biopsychosocial Theories of Health; Symptom Management; Self-Management; NURS 917, Advanced Statistics for Clinical Nursing Research; NURS 929, Ethical Conduct of Clinical Research; and NURS 941, Health Policy, Leadership, and Systems.

The grading system includes Honors, High Pass, Pass, and Fail. Students must maintain a High Pass average and achieve a grade of Honors in at least two core courses to remain in good standing. High Pass is required in all core courses in the first year for a student to be eligible to take the Preliminary Examination. After the first year, no more than one grade of Pass in a core course will be permitted. A grade of Pass or better is required for all cognates, including the required advanced analysis course.

In addition to all other requirements, students must successfully complete NURS 929, Ethical Conduct of Clinical Research, prior to the end of their first year of study. This requirement must be met prior to registering for a second year of study.

Graduate Research Assistant and Teaching Fellow Experience
During the first two years of the program, students are Graduate Research Assistants with faculty mentors and participate in the mentor’s ongoing research.

Teaching experience is also considered to be an integral part of graduate education. Therefore, two terms as a Teaching Fellow are required. Teaching Fellows assist with the teaching of larger master’s-level courses, typically during their third year of doctoral study.

Examinations
Successful completion of three examinations is required.
1. The Preliminary Examination is taken in June after the first year of course work has been completed. A grade of High Pass or better in each core course is required. The Preliminary Examination is intended to allow the student to demonstrate mastery of doctoral course work. Passing the Preliminary Examination is a prerequisite for continuing in the second year of doctoral study.

2. The Qualifying Examination typically takes place at the end of the second year of study, when required course work is completed. If the Qualifying Examination is not completed by the end of the sixth term, the student will be placed on Academic Probation. If not completed by the end of the seventh term, the student will be dismissed from the program. The student prepares a comprehensive dissertation proposal containing a statement of the problem to be studied, conceptual framework, critical review of relevant literature, design, methods, and plan for analysis. The oral Qualifying Examination typically lasts 1 to 1.5 hours. The student gives a 15-minute formal presentation of the proposed study and answers questions regarding the research and related topics. Successful completion of the Qualifying Examination is required for candidacy for the doctoral degree.

3. The Final Oral Examination is based on the dissertation. The dissertation is intended to demonstrate that the student is competent in the chosen area of study and has conducted independent research. The Final Oral Examination typically lasts 1.5 to 2 hours. The student gives a 15- to 20-minute formal presentation of the dissertation and answers questions. Successful completion of the Final Oral Examination is required before the Ph.D. can be awarded.

M.S.N./PH.D. JOINT-DEGREE PROGRAM

The joint-degree program combines the two-year M.S.N. degree from the School of Nursing and the five-year Ph.D. in Nursing. The joint program allows students to complete requirements for both degrees in five years. Applicants for admission to the joint program must be admitted to both schools. Students typically enter the joint program at matriculation, but M.S.N. students who are completing the Research Concentration may apply to the Ph.D. program while enrolled in the fall of year two of the M.S.N. degree. Students will be assigned a Ph.D. adviser upon enrollment in the joint program; the adviser will work closely with the student to determine a plan of study, course selection (aligned with the student’s research interests), and the development of research ideas. The first two years of the program are spent in the School of Nursing, completing all requirements for the M.S.N. degree. In the second year, students will complete the Research Concentration, which provides mentored research experience and the development of a research proposal. The M.S.N. Research Concentration will fulfill one half of the first-term Research Assistantship in the Ph.D. program. Students are eligible to take Graduate School courses while enrolled at the School of Nursing, with up to three courses counting toward both degrees. Students may have the opportunity to undertake additional mentored research experiences in the summers following years one and two, including research assistantship hours.

The minimum residence requirement in the program is five years. The tuition requirement is two years in the School of Nursing, and three years in the Graduate School. Financial aid is awarded by each school according to its own criteria. While enrolled at the School of Nursing, students are eligible to compete for financial aid available to master’s students, but are not eligible for Graduate School aid. Once they have completed the M.S.N. degree and are enrolled in the Graduate School in year three, students in the joint-degree program receive a full doctoral financial aid package, including up to three years of tuition, stipend, and a Health Award to cover the cost of Yale Health Hospitalization/Specialty Coverage. Students are expected to complete the joint-degree program within five years.

The M.S.N. and Ph.D. degrees are awarded separately, upon completion of the M.S.N. requirements (at the end of the second year of study in the M.S.N. program by the School of Nursing), and upon completion of the requirements for the Ph.D. by the Graduate School of Arts and Sciences. To qualify for the M.S.N. and Ph.D. degrees, students must satisfy all degree requirements of both schools. Any exception to this pattern of study must be approved by the DGS and the appropriate associate dean.

MASTER’S DEGREE

M.Phil. This degree will be granted to Ph.D. students who successfully complete two years of course work, but do not progress to the dissertation stage. To be awarded the M.Phil. degree, students need to complete all core courses, four cognates (may include independent study with faculty), and two years of Graduate Research Assistant experience, and must pass the Preliminary Examination. This degree is normally granted only to students who are withdrawing from the Ph.D. program.

For information on the terminal master’s degree offered by the Yale School of Nursing (Master of Science in Nursing), please visit the School’s website, http://nursing.yale.edu.

REQUIRED COURSES

All Ph.D. students are required to take the following courses. For a complete list of Nursing courses, see the School of Nursing bulletin, online at http://bulletin.yale.edu; and Online Course Information (OCI) at https://students.yale.edu/oci.

NURS 901a, Research Methods I: Quantitative Methods for Health Research  Staff

This course in research methods provides an opportunity to evaluate various scientific designs for investigating problems of importance to nursing and health, with a focus on quantitative research methods. Emphasis is placed on the interrelationships of the research question and study aims with study design and method—with the goal of understanding methods decisions that are made by researchers, and how these decisions influence study validity. The Yale Model for Generation of Knowledge for Evidence-Based Practice is introduced. The course prepares the student for designing a quantitative study. Required of all Ph.D. students in nursing. Open to master’s students with permission of the instructor. Three hours per week.
NURS 902b, Research Methods II: Qualitative Methods for Health Research  Staff
This course introduces the student to major approaches to qualitative research, including newer and innovative methods. Selected topics are presented linking qualitative approaches with stage of knowledge development and steps in the research process, including use of theory, design, conduct, analyses, rigor, reporting, and evaluation of qualitative research. Emphasis is placed on the appropriate use of qualitative methods and differences across qualitative approaches depending on the nature of the research question. The course includes practice with key elements of data collection, analysis, reporting, and critiquing. Required of all Ph.D. students in nursing. Three hours per week.

NURS 903a, Research Methods III: Measurement of Health Variables  Staff
This course focuses on theory of measurement and reliability and validity of research instruments—with emphasis on interaction of conceptual, methodological, and pragmatic considerations. An integration of seminar and lecture is employed. Required of all second-year Ph.D. students in nursing. Open to advanced graduate students in other schools of the University. Three hours per week for seven weeks.

NURS 904a, Research Methods IV: Mixed Methods  Staff
The purpose of this course is to provide an overview of mixed methods research. This overview consists of the history, philosophical foundations, purpose, data collection, analysis, and evaluation of the common mixed methods designs. Required of all Ph.D. students in nursing. Three hours per week for seven weeks.

NURS 905b, Research Methods V: Intervention Development  Staff
This course focuses on the research methods necessary for the understanding, developing, and testing of interventions to improve outcomes in health and illness. Content includes the use of various approaches to the development of biobehavioral interventions. The second half of the module deals with methodological issues in carrying out clinical intervention research. Required of all second-year Ph.D. students in nursing. Open to others with permission of the instructors. Three hours per week for seven weeks.

NURS 906a, Dissertation Seminar I  Staff
This required doctoral course provides the student with advanced study and direction in research leading to development of the dissertation proposal and completion of the dissertation. Students are guided in the application of the fundamentals of scientific writing and criticism. All Ph.D. students in nursing are required to take this seminar every term. Three hours per month.

NURS 907b, Dissertation Seminar II  Staff
This required doctoral course provides the student with advanced study and direction in research leading to development of the dissertation proposal and completion of the dissertation. Students are guided in the application of the fundamentals of scientific writing and criticism. All Ph.D. students in nursing are required to take this seminar every term. Three hours per month.

NURS 908a, Science, Scholarship, and Communication of Knowledge I  Staff
This is the first course in a four-course sequence designed to socialize the student into the roles and responsibilities of a Ph.D.-prepared nurse scientist. Students develop specific beginning competencies necessary to engage in a career as an independent nurse scientist, including basic principles and processes of scientific writing and communication, and research priorities and strategies for building a program of research. The NURS 908, 909, 910, 911 seminar series accompanies the research practicum and is required of all Ph.D. students in nursing. One hour every other week.

NURS 909b, Science, Scholarship, and Communication of Knowledge II  Staff
This is the second course in a four-course sequence designed to socialize the student into the roles and responsibilities of a Ph.D.-prepared nurse scientist. Students develop specific beginning competencies necessary to engage in a career as an independent nurse scientist, including basic principles and processes of grant writing and communicating research results. The NURS 908, 909, 910, 911 seminar series accompanies the research practicum and is required of all Ph.D. students in nursing. One hour every other week.

NURS 910a, Science, Scholarship, and Communication of Knowledge III  Staff
This is the third course in a four-course sequence designed to socialize the student into the roles and responsibilities of a Ph.D.-prepared nurse scientist. Students develop specific beginning competencies necessary to engage in a career as an independent nurse scientist, including basic principles and processes of peer review, responding to research critiques, and publishing research results. The NURS 908, 909, 910, 911 seminar series accompanies the research practicum and is required of all Ph.D. students in nursing. One hour every other week.

NURS 911b, Science, Scholarship, and Communication of Knowledge IV  Staff
This is the fourth course in a four-course sequence designed to socialize the student into the roles and responsibilities of a Ph.D.-prepared nurse scientist. Students develop specific beginning competencies necessary to engage in a career as an independent nurse scientist, including basic principles and processes of grant management, mentorship, career planning, and roles and responsibilities of the nurse scientist and leader. The NURS 908, 909, 910, 911 seminar series accompanies the research practicum and is required of all Ph.D. students in nursing. One hour every other week.

NURS 912a, Foundations of Scientific Inquiry I: Philosophical and Theoretical Basis for Nursing Science  Staff
In this course students examine the nature of the philosophical and theoretical basis for nursing science. The nature of science is explored through a dialogue of competing philosophical perspectives, such as logical positivism, post-positivism, historicism, critical theory, and post-structuralism. The philosophies that have informed the scientific process and the conceptual and theoretical underpinnings
of nursing science are discussed. Specific approaches to concept/theory development and analysis, with linkages to philosophical perspectives, are examined. Required of all Ph.D. students in nursing. Three hours per week.

**NURS 913b, Foundations of Scientific Inquiry II: Theories of Health, Symptom Management, and Self-Management**  
Staff  
This course examines major conceptualizations of health and illness, self- and family management, and research supporting these conceptualizations. Emphasis is placed on the link between health and illness self-management, with particular emphasis on vulnerable populations, and related concepts such as symptom distress, self-efficacy and coping, and the contributions of risk and protective factors to self-management. Self-management is considered from both an individual and family perspective, and sociocultural influences on self-management are explored. Required of all Ph.D. students in nursing. Three hours per week.

**NURS 917b, Advanced Statistics for Clinical Nursing Research**  
Staff  
This term-long course starts with linear regression and advances to additional multivariate analyses most commonly used in nursing studies. The emphasis is on attaining a conceptual understanding of these statistical techniques, selecting appropriate techniques for a given clinical research problem, conducting computer-assisted data analyses, and correctly expressing the results of such analyses. The laboratory part of the course covers fundamentals of data management and statistical analysis, and proceeds to the conduct of advanced analyses. The course emphasizes using programming language in SAS®. Required of all Ph.D. students in nursing; open to master's students with permission of the instructor. Four hours per week (two hours seminar, two hours lab).

**NURS 929b, Ethical Conduct of Clinical Research**  
Staff  
The course introduces major concepts in the ethical conduct of clinical research from the perspective of the advanced practice nurse and the nurse-researcher. National and international ethical codes for research and regulatory requirements are reviewed. Emphasis is placed on the protection of vulnerable populations and community-based research, including international research. Required of all Ph.D. students in nursing. Open to others with permission of the instructor. One hour per week.

**NURS 941b, Health Policy, Leadership, and Systems**  
Staff  
The course addresses salient issues in health policy and the challenges to linking research and clinical care with public and private policy agendas. The course covers the following topics: health care delivery systems; policy and political factors that affect access to care and its financing, delivery, and quality; challenges to evidence-based policy and the dissemination of research findings to policy and community-based leaders. It also includes theories of leadership and policy change relevant to students’ research topics. Critical thinking, problem-solving skills, and research-based analysis are integrated throughout the course. A major written assignment suitable for submission to a peer-reviewed journal (or that can be easily modified for same) is a course requirement. Prerequisite: students must pass a test based on the online Yale University School of Nursing Health Policy Module. Required of all Ph.D. students in nursing. Three hours per week.

**ELECTIVES**

**NURS 920a and NURS 921b, Doctoral Independent Study**  
Staff  
This elective is initiated by the student and negotiated with faculty. The purpose is to allow in-depth pursuit of individual areas of interest and/or practice. A written proposal must be submitted and signed by the student, the faculty member(s), and the program chairperson.

**NURS 927b, Research in Care of People with Cancer or at Risk for Cancer and Their Families**  
Staff  
This course focuses on the current state of the science in care of people with cancer, or at risk for cancer, and their families. Specific attention is paid to factors associated with quality-of-life outcomes, such as symptoms, functional status, and affect; and factors that place people at high risk, such as family history, ethnicity, and socioeconomic class. Research from nursing, medicine, and the social sciences is discussed. Two hours per week.  
2 Course cr

**NURS 931b, Creating Methods: Innovation and Synthesis**  
Staff  
This elective doctoral seminar explores methodological development in nursing and health research, through illustration of how methodological perspectives are conceptualized and systematically analyzed, in order to prepare the learner to contribute to the methods literature. During the first part of the course, we examine methods papers of various types. Each student prepares a methods paper of publishable quality. Ideally, this may become a methods paper for the dissertation. There is a focus on advanced quantitative design, including large datasets and secondary analysis.  
0 Course cr