

Ph.D. Program Handbook

2021-22

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Yale University School of Nursing Ph.D. Program in Nursing Handbook 2021-2022

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It is an honor and an inspiration to welcome you as you begin this academic year among our proud YSN community of scholars, and to wish you each productive and successful years ahead.

You will be building your science on decades of research traditions and accomplishments of the faculty, students, and alumni of Yale School of Nursing. From Ada Sue Hinshaw's founding of what is now the NINR, to Rhetaugh Dumas's first randomized controlled trials in nursing, to today's stellar faculty advancing the health of structurally marginalized populations towards greater equity, you are joining important traditions. You will also contribute to these dynamic traditions, in the years and decades ahead. You will be stimulated and supported in your work by your dedicated and experienced faculty, and by each other as peers with shared passions.

I look forward to the important work that you will accomplish in this Ph.D. Program. Ph.D. prepared nurses are literally a precious resource not only for our profession but for science that matters in the world. And this is a time that the world truly needs the contribution and impact of our science.

You will distinguish yourselves with critically important contributions to academia, health care, and policy arenas. My vision for you, as graduates of the YSN Ph.D. Program, is that you excel as our next, needed and powerful, generation of scientists, faculty, leaders, and advocates for *Better Health for All People*.

Respectfully,

Ann Kurth, Ph.D., C.N.M., M.P.H., F.A.A.N. Dean and Linda Koch Lorimer Professor of Nursing

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The Yale School of Nursing (YSN) is recognized as the birthplace of clinical nursing research and is long renowned for its excellence in graduate education. The Yale School of Nursing holds a unique place in the history of nursing inquiry. Early nurse researchers such as Virginia Henderson, Rhetaugh Dumas, Florence Wald, Jean Johnson, and Donna Diers did their pioneering work here. The Ph.D. Program is based on the disciplinary perspective of nursing and incorporates distinct nursing knowledge and knowledge from other disciplines, building on the rich history of the pioneers.

The Yale School of Nursing emphasizes the tripartite mission of clinical practice, research, and teaching based on the belief that research informs practice, practice informs research, and both inform teaching. YSN is committed to the preparation of the next generation of intellectual leaders, scholars, educators, and scientists to improve the health care of individuals, families, and communities and to contribute to the development of our science.

Characteristics of the YSN Graduate

Nursing science has been at the forefront in advancing knowledge in health promotion, chronic illness care, symptom management, risk reduction, care of marginalized populations, palliative, and end-of-life care. Nursing science focuses on improving physical, psychological and social wellbeing in individuals, families and communities at risk for and experiencing acute or chronic illness. The ongoing advancement of nursing science is crucial to the delivery of high-quality, patient-family centered, and costeffective health care.

At the completion of the program, graduates are able to:

- Design and conduct clinically relevant research;
- Extend nursing science by empirical investigation of nursing phenomena and theories;
- Promote the delivery of quality health care by assuming leadership roles in the nursing profession, educational and policy arenas; and
- Disseminate knowledge generated by independent, collaborative, and transdisciplinary research efforts.

YSN Mission Statement

The Mission of the Yale School of Nursing is "*Better Health for All People*". We accomplish this by educating each generation of nurse scientists, leaders, scholars and practitioners to improve health outcomes and transform healthcare. Building on the tradition of our Founding Dean, Annie W. Goodrich, the YSN community relates the "adventure of thought to the adventure of action, in touch with the fundamentals of human experience" across local, national and international systems of care.

YSN Values Statement

The Yale School of Nursing is a community that holds an expansive view of health and believes that access to high quality patient-centered health care is a social right, not a privilege. In our intellectual and clinical work, we value integrity, dignity, diversity, inclusivity, rigor, curiosity and excellence. Mindful of our traditions, as well as those of Yale University, we emphasize innovation grounded in creativity and the integration of education, scholarship, practice and policy in service of social justice and health equity. Respect for diversity of thought, ideas, and opinions guides our work. We are committed to interprofessional education, research, and practice and mentorship of the next generation of scientists and leaders. We strive to create an environment for study that is caring and supports openness and transparency.

Commitment To Diversity, Equity, Inclusion, And Belonging (DEIB)

Acknowledgements. Yale University acknowledges that indigenous peoples and nations, including Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Niantic, and the Quinnipiac and other Algonquian speaking peoples, have stewarded through generations the lands and waterways of what is now the state of Connecticut. We honor and respect the enduring relationship that exists between these peoples and nations and this land. Further, we acknowledge the extensive labor of people who were enslaved in the United States, primarily of African descent. Their exploited labor provided a framework upon which much of this country was built, with little recognition. We recognize the labor of many Black and Brown people whose lives were taken for the benefit of our country.

YSN DEIB Commitment. YSN strives to be an inclusive academic environment, which recognizes and encourages diverse perspectives as an expectation in the learning process. YSN welcomes the range of human experiences and social

representations of all identities. Students are encouraged to be active participants in the learning process, which includes contributing to discourse in the classroom. YSN faculty, staff, and administration are committed to creating and sustaining a learning environment that equitably supports diverse representation and thought. We all share and belong at Yale, and we encourage varying opinions, based on the belief that all students have value and that sharing unique perspectives is an asset to the educational experience. Additionally, we are devoted to fulfilling our role in dismantling systems of oppression that do not align with our commitment to excellence in DEIB. For support related to DEIB, contact the YSN Office of Diversity, Equity, and Inclusion at ysn.diversity@yale.edu or (203) 737-6594.

Yale University Policy Against Discrimination and Harassment. Yale University is committed to maintaining a non-discriminatory learning and working environment for students, faculty, and staff. As defined in this policy, Yale prohibits discrimination, harassment, and retaliation. These forms of conduct undermine Yale's mission and its commitment to diversity, equity, and belonging. Yale adopts this policy with a commitment to preventing and addressing discrimination, harassment, and retaliation, consistent with Connecticut and federal law. If you feel that you have been subjected to discrimination or harassment, please contact the YSN Discrimination and Harassment Resource Coordinator, Maurice Nelson, at Maurice.nelson@yale.edu or (203) 737-6594. For more information on Yale's policy against discrimination and harassment, visit the Office of Institutional Equity and Accessibility website.

Yale Graduate School of Arts and Sciences Diversity Statement https://gsas.yale.edu/diversity

As a graduate student, you aspire to learn material at a deeper level than you encountered in your undergraduate studies. Perhaps you want to contribute new knowledge to your field, do research that will impact public policy, or give back to your community through teaching. Whatever brings you here, and whatever your background or identity, Yale can help you achieve your goals.

Our mission at the Graduate School of Arts and Sciences is to educate graduate students to seek answers to life's most challenging questions. We are a community of individuals from many different backgrounds, and we recognize that a diverse student body and faculty enhance every aspect of our community. All races, genders, abilities, citizenships, and identities are welcome here.

The staff and fellows of the Office for Graduate Student Development and Diversity (OGSDD) are invested in maintaining a caring and inclusive community in support of diversity and inclusion. We work collaboratively and proactively with every department or program to support students' needs, and we are eager to work with you to make your experience here personally and academically enriching. We encourage you to take full advantage of the programs that OGSDD provides.

ADMISSION REQUIREMENTS

Minimum requirements for admission to the YSN Ph.D. program include:

- Master's degree in nursing or equivalent
- Grade point average of 3.5 on a 4.0 scale for graduate level work preferred
- Competitive Graduate Record Examination (GRE) taken no more than 5 years prior to application
- Applicants whose native language is not English must present evidence of proficiency in English by satisfactorily completing the Test of English as a Foreign Language (TOEFL), which is administered by ETS, or the International English Language Testing System (IELTS). Applicants who have received or will receive an undergraduate degree from a college or university where English is the primary language of instruction are exempt from the English Language Test requirement and are not required to submit the TOEFL or IELTS. Applicants must have studied in residence at the undergraduate institution for at least three years to qualify. The TOEFL or IELTS, if required, should be taken as early as possible to ensure that official scores are released and received no later than the stated deadline of the program for which the student is applying.
- Previous coursework in statistics within the last 5 years with a minimum grade of High Pass, B, 3.0 or equivalent
- Completion of a graduate-level research methods course within the last 5 years with a grade of at least High Pass, B., 3.0 or equivalent
- Admission essay as described in the online application
- References from three individuals, one of whom must hold an earned doctorate, that address the student's aptitude for research and Ph.D. study
- Sample of written work (e.g., published article, thesis, literature review with applicant as sole author or first author)

Applications are submitted online to the Graduate School.

[https://apply.grad.yale.edu/apply/]. Acceptance to the YSN Ph.D. program is highly competitive. Competitive applicants will be invited for an interview with YSN faculty members. Final admission decisions are made by the Yale University Graduate School of Arts and Sciences. The Yale School of Nursing does not offer the option of a combined degree.

ADMINISTRATIVE STRUCTURE

The Ph.D. degree at YSN is conferred by the Graduate School of Arts and Sciences (GSAS) at Yale. The administrative structure consists of the Dean of the GSAS, the Dean of YSN, Co-Chairs of the Ph.D. Program (Directors of Graduate Studies), the Ph.D. Program Committee, and a faculty advisement system.

Dean of the GSAS

The Dean of the GSAS is Dr. Lynn Cooley. The Dean's office provides centralized support for students of GSAS. This office sets and administers Graduate School policy, stewards and distributes University resources, advocates for the needs of graduate students, and provides leadership to advance the vision and strategic direction of the Graduate School.

Dean of Yale School of Nursing

The Dean of YSN is Dr. Ann Kurth. The School of Nursing provides support for YSN Ph.D. students in the form of financial support for those without external funding, office space, and use of YSN resources.

Co-Chairs of the Ph.D. Program

The Dean of the Graduate School appoints a senior faculty member(s) as the (Co)-Chair(s) of the Ph.D. Program (also called Director(s) of Graduate Studies—DGS). The Co-Chairs of the Ph.D. Program, Dr. Tish Knobf and Dr. Lois Sadler, are responsible for general oversight of the Ph.D. Program and chair the Ph.D. Program Committee.

It is the responsibility of the Program Co-Chairs (DGS) to:

1. Ensure that all students know how to access policies and procedures and are informed of any updates. Distribute information to individual student cohorts regarding relevant milestones and opportunities. Ensure student cohorts and their advisers understand the expectations and processes for completing these milestones.

2. Meet with individual students annually to address and document their progress through the program of study.

3. Conduct monthly meetings for all YSN Ph.D. graduate students to discuss and receive feedback on program-wide issues.

4. Know who the student leaders of the program are and meet with them regularly. The student leaders in the Ph.D. program at YSN are the student representative for

the Graduate Student Assembly [GSA] and/or the Graduate and Profession School Senate [GPSS]

5. If the program is without an elected student leader in the GSA and/or GPSS, the DGS will create a process to establish student leadership in the program and encourage the student leadership to nominate a student to represent the students in the Ph.D. program at YSN in the GSA.

6. In collaboration with the Job Placement Officer and adviser, the DGS will advise students on their career paths, including participating in conferences and professional meetings, seeking post-doctoral fellowships, and obtaining employment post-graduation.

7. Identify to whom students can turn (DGS, Chair, GSAS deans, etc.) if challenges arise in working with their adviser and be familiar with other University resources for student support (Dean's Designees, Title IX office, Office of Institutional Equity and Access, mental health and wellness resources, etc.).

8. Provide written feedback to students on their academic progress at least once per year. This will be done in collaboration with the students' annual self-assessments and in consultation with the adviser and the Progression Committee at the end of the academic year.

a. Pre-candidacy: Explain when and what form the feedback takes (in writing, in person, both). When there is an in-person meeting (recommended annually), indicate who is present.

At the end of each academic year the Progression Committee meets to review each student's progress. See Progression Committee description, p. 16.

b. Post-advancement to candidacy:

i. Explain the Dissertation Progress Report (DPR) and its usefulness to advisers and students. The DGS will also ensure students, advisers, and the DGS complete their portions of the DPR by the required deadline. DPRs are due by the end of each academic year and are generally completed in the spring semester.

ii. At the end of each academic year the Progression Committee meets to review each student's progress. See Progression Committee description, p. 16.

c. For students both pre- and post-advancement to candidacy: If a student is not making sufficient progress toward the degree or producing quality work, make sure that this information is communicated in writing to the student, along with necessary steps to remain in or return to good academic standing, including objective goals, deadlines, and consequences for failing to meet these requirements. 9. There are some situations when there may be a need for a change in the studentadviser team.

a. When the need for the change emerges from a change in the student's research focus, then the student, adviser and DGS should meet together and determine the best approach for aligning the student with a different adviser.

b. In situations where the change may arise from sensitive circumstances such as irreconcilable differences between the student and adviser, an adviser's departure, or the addition of new faculty, the following options are available and are individualized for each situation. The student should first talk with the adviser, but if this is not possible the student may speak with the DGS for confidential consultation about remedying the situation or advice about approaches for working with the adviser. In the case where there may be the need for a change in adviser the DGS will speak with the adviser about the situation, and this will usually be followed by a meeting with student and adviser to determine a plan for changing advisers. If needed, additional options for consultation are available for the student, adviser, or DGS through the various University resources (eg. Title IX, Health and Mental Health services, etc.) and GSAS Associate Dean for Graduate Academic Support, Dr. Allegra di Bonaventura. Dr. Bonaventura is also available for confidential consultation, or when the student's adviser is also in the role of DGS.

10. Provide formal exit interviews with graduating students for feedback on department guidelines and practices. For example, were the responsibilities of student, adviser, DGS, and thesis committee met? Were timelines reasonable? How could the program improve the advising/mentoring experience?

Ph.D. Program Committee

The Ph.D. Program Committee serves as both the executive and the admissions committee and meets at least one time per month during the academic year. The committee consists of tenured and tenure-track YSN faculty, the majority of whom are also Faculty in the Graduate School of Arts and Sciences. A Ph.D. student is appointed to and serves as the student representative to the Ph.D. Program Committee.

Advisement System

These Advisement Guidelines are a supplement to the GSAS Guide to Advising Processes for Faculty and Students

Academic Adviser (pre-candidacy):

Upon admission to the Ph.D. program, the Co-Chairs of the Ph.D. Program, in consultation with the Ph.D. Program Committee, assign each student an academic adviser based upon the student's scholarly interests and potential dissertation topic. The faculty adviser meets regularly with the Ph.D. student during the academic year. The faculty adviser assists the student in designing a program of study to

meet the student's individual needs and meet the requirements of the curriculum in a timely manner. Faculty and students and faculty will strive to create an environment and plan that prioritizes work/life balance.

It is the responsibility of the Academic Adviser to:

1. Establish expectations with each student for communication, including the preferred means (e.g. email, text, phone, etc.), the best contact times, and shared expectations around response times.

2. Establish expectations for the format (e.g., in-person, virtually) of student/adviser meetings to discuss the student's work. Meetings should occur every 1-2 weeks depending on the needs of the student and current progress through the program.
 3. Discuss guidelines for working hours, scheduling vacation time, (see description of vacation time on p. 49) and other activities or resources necessary for students'

mental and physical health.

4. Be cognizant of work/life balance regarding the student's schedule, research, and progress (e.g., religious observance, family obligations, etc.).

5. Understand the required program and GSAS milestones for students. Work with the student to recognize when completion of these requirements may require an adjustment to research responsibilities (e.g., when a student must reduce time devoted to research to prepare for a qualifying exam) and help facilitate any adjustments necessary.

6. Help the student develop and document an individualized timeline for completing academic requirements and meeting professional goals.

7. Begin to discuss career goals and opportunities with the student early in their graduate career and continue these discussions regularly. Encourage students to seek opportunities to attend conferences and submit publications to help advance their careers, and strategies for communication with potential research partners and committee members.

8. Discuss research expectations with the student early in their graduate career. This should include topics such as authorship ethics and co-authorship guidelines, time spent on outside collaboration, and time spent on professional development.

9. Provide guidelines on the process and timeline for eliciting feedback from adviser and other members of committee. Review all related written work by the appropriate deadlines.

10. Meet with the student about choosing other members of the Dissertation Committee. These discussions should occur regularly in the pre-candidacy phase and may be embedded in the regular advising meetings that should occur every 1-2 weeks.

11. Provide guidance and information about health and mental health resources offered by the university and assist students in utilizing them when asked.

12. Discuss with the DGS and dissertation committee members if issues arise related to the student's responsibilities.

13. Be familiar with the student's four years of full funding and when this structure may change due to external grant or scholarship support (see p 51). Talk with the

student and/or the DGS about possible sources of funding within and external to the university

14. Remain open to feedback and be willing to discuss difficult academic ideas and differences of opinion in order to facilitate all students' success. **Dissertation Chair and Adviser (post-candidacy)**

As a student's dissertation topic becomes more refined, the student will select, in consultation with the academic adviser and DGS, the Chair of the Dissertation Committee based upon the faculty member's expertise and mutual research interests. Once the dissertation chairperson is selected, this individual assumes all advising responsibilities, including academic advising and direction of the dissertation research. The student and Chair of the Dissertation Committee will work collaboratively to identify two other members of the Committee. The Chair and at least one member of the Dissertation Committee must be YSN faculty members. The other committee member may be a YSN faculty member or a faculty member in a school or university external to YSN. At least two of the Committee members must be on the faculty of the Graduate School of Arts and Sciences, and these members serve as GSAS Readers for the final dissertation (See Dissertation section, p. 38).

The Committee members are selected based upon their substantive and methodological expertise. The Dissertation Committee assists the chairperson in advising the student during all phases of the research process (conceptualization, collection analysis and interpretation of data) and completion of the written dissertation and its oral defense. The Dissertation Committee designates the student's dissertation as complete and ready to be defended orally. The composition of the committee may change during the course of conducting the dissertation, with approval from the Co-Chairs of the Ph.D. Program.

It is the responsibility of the Chair of the Dissertation Committee to:

- 1. Assume the responsibilities of the Academic Adviser as denoted above. Review all written work, give feedback and approve the prospectus and the dissertation by the appropriate deadlines. Review and complete Dissertation Progress Reports annually.
- 2. Meet with the student approximately every 1-2 weeks during the dissertation phase.
- 3. Review the proposed research for scientific quality and provide advisory input to the student. Advise students on principles of team science in working with dissertation committee.
- 4. Mentor the student in preparing and submitting IRB materials.

- 5. Assure appropriate protection of human subjects according to IRB guidelines and procedures and HIPAA regulations consistent with guidelines and requirements presented in the first-year core course, N929 Responsible Conduct of Clinical Research.
- 6. Recommend change in the membership on the Committee, subject to concurrence by the student and the Co-Chairs of the Ph.D. Program.
- 7. Submit the forms certifying the outcomes of the Qualifying Examination and the Final Oral Examination (dissertation defense).

It is the responsibility of the student to:

1. Complete academic requirements by the given deadlines as laid out in the Ph.D. student handbook and in consultation with the DGS and adviser.

2. Schedule regular meetings with adviser (every 1-2 weeks) and prepare an informal agenda for meetings. Identify and discuss short-term (semester/academic year) and long-term goals at the beginning and end of each semester.

3. Maintain clear communication with the adviser and be clear about your work/life schedule and deadlines, including any religious observances or family obligations.

4. Regularly discuss research expectations with the adviser. These discussions should include topics such as professional guidelines for authorship, time spent on outside collaboration, priorities for publications, plans for submission of abstracts to professional meetings, and time spent on professional development.

5. Submit materials with enough time for proper faculty review and response. These materials may include, but are not limited to:

a. Dissertation chapters

- b. Material for discussion at regular meetings
- c. Requests for letters of recommendation
- d. Course papers, abstracts, grants, and manuscripts

6. Keep the adviser aware of upcoming deadlines, meetings, and other

responsibilities. Be proactive in the advising relationship. For example, take the initiative to arrange meetings, keep the adviser informed of any circumstances that might affect academic progress, come prepared to advising meetings, consult with the adviser about presenting or publishing work.

7. Remain open to feedback and be willing to discuss difficult academic ideas and differences of opinion.

8. Commit to regular attendance at program, school or departmental talks and events according to program and adviser expectations.

9. Welcome prospective students and help them understand program or research group practices and culture.

10. Finalize membership of the dissertation committee with the help of the primary adviser.

11. Review your 4-year timeline of funding with your adviser and understand when funding may change due to external grants or scholarships (see p. 51). Talk with your adviser and/or the DGS about possible sources of funding or research support(see listing of funding sources, p.51).

12. As you advance to candidacy, establish your expected timeline towards degree, and come to a consensus about these expectations with your adviser and dissertation committee.

13. Be aware of mental health and wellness resources offered by the university.14. Meet with the DGS for consultation or to intercede if issues arise related to the adviser's responsibilities.

It is the responsibility of the Dissertation Committee to:

- 1. Advise the student with respect to the research plan.
- 2. Attend committee meetings having reviewed all relevant materials.
- 3. Review the dissertation proposal and participate in the proposal defense (Qualifying Exam).
- 4. Be available to the student regarding the research and dissertation process, and meet with the student at regular intervals, as determined by the program.
- 5. Read the dissertation and, when appropriate, designate the dissertation as complete and ready to be defended orally.
- 6. Establish a timeline to graduation with the student and work with the student and primary adviser to ensure this timeline is followed.
- 7. Participate in the dissertation defense.
- 8. Complete the Notification of Readers Form.

Other Mentorship. There are often additional options for formal or informal mentorship within the school or as part of external scholarships, fellowships and funded grants. For example, grants from The Heilbrunn Family Center for Research Nursing and Yale Center for Clinical Investigation include mentors related to leadership and scholarship activities. Communication among the student, YSN adviser and external mentors is essential to foster positive and coordinated direction and growth for the student. The following link includes many helpful resources for mentors and mentees. Resources – CIMER (cimerproject.org)

Professional Development, Post-Doctoral Fellowships and Job Market Advising. The Dissertation Chair is often the point person for post-doctoral fellowship and job market advising. This advisement usually begins in the second or third year of the program. In most cases, Ph.D. students elect to apply to post-doctoral fellowships, however, if other career paths are chosen, the Chair, DGS and GSAS resources such as the Career Center will assist the student in professional development opportunities (especially at research conferences), job searches, and applications.

Progression Committee

The Progression Committee, consisting of Co-Chairs of the Ph.D. Program and at least one additional Ph.D. faculty member, convenes annually with the purpose of ensuring that students are adhering to relevant school, university and funding source guidelines and are progressing and achieving milestones in a timely fashion. Benchmarks for each year of the Ph.D. Program, aligned with program goals, have been identified. Students are required to submit an Annual Review Form in collaboration with their Faculty Adviser in May. If the Annual Review Form is not completed, students will be unable to register for the subsequent semester. The Progression Committee reviews each student's progression through the program and will determine if a student is 'Meeting Recommendations' or 'Needs Improvement'. A letter summarizing strengths and areas to improve will be sent to each student and faculty advisers.

Ph.D. PROGRAM REQUIREMENTS

Overview of Program Review and Revision

Strategic directions in nursing doctoral education and YSN Ph.D. program alignment.

The majority of nursing Ph.D. curricula in the United States follow the original AACN (1987) curriculum published nearly 30 years ago (Wyman & Henly, 2015). A review of 120 nursing Ph.D. programs concluded that changes in education for the next generation of Ph.D. students are critically needed to support advancement of nursing science. Reflecting on necessary future direction for Ph.D. education in nursing, in this proposal we highlight the importance of having curricula that prepare 21st century nursing Ph.D. students to interrogate socially and globally relevant questions about health and illness, including biologic and genomic mechanisms (McCauley, 2020), structural factors with clear health impact including racism (Porter & Barbee, 2004), and accelerating trends like global warming (Leffers et al, 2017). There is important current research underway regarding symptoms, management of acute and chronic conditions, and biobehavioral approaches for understanding and addressing health conditions. Yet, there needs to

be more attention to the influence of social determinants of health on these conditions as well as on health promotion and disease prevention in community settings (Adams, 2019). Health promotion, disease prevention, and care of those with chronic or acute health conditions occurs at multiple levels; individual, family, agency, community, and beyond, so that nursing care approaches and nursing science are a critically important in all these areas.

While national and regional discussions have not yet produced a consensus about nursing Ph.D. strategic directions, there are some **key themes on future directions**.

- 1. There is an urgency to update Ph.D. program curriculum to reflect current trends in population health management, implementation science, data science, and team science (Thompson et al., 2018).
- 2. There is a need to adopt a vision that address needs of patients outside of the sole clinical encounter.
- 3. It is important to build competence in newer methods such as genomics and informatics to improve precision health, clinical care and patient/population outcomes.
- 4. There is a need to embrace a more formidable link between research and practice (implementation science) within nursing (including interactions between Ph.D. and DNP students) as well as promoting authentic reciprocity across disciplines (team science). The AACN 'New Era' report calls for better integration of DNP and Ph.D. prepared nurses to achieve better integration of research into clinical practice (Enders, et al., 2016). The YSN Population Health three-day June intensive N985 is a core course for DNP and Ph.D. students and the interaction of DNP students and Ph.D. trainees offers tremendous collaborative learning opportunities.
- 5. Team science traditionally links to medicine and public health, and future directions should include expansion such as with behavioral and political sciences.
- 6. Research is needed on the social determinants of health as espoused in the WHO SDH Commission (*Closing the Gap in a Generation*), and health promotion in the Nursing Now Campaign (Adams, 2019). There has been insufficient attention to 21st century megatrends (e.g., viral pandemics, climate change, global health, migration, urbanization) and major health system changes (e.g., coordination with community entities, telehealth). The shortage of nurses with Ph.D. degrees and limited resources to support R1-level schools of nursing underscores the need for highly strategic thinking about Ph.D. program foci.

As we refine and revise the YSN Ph.D. curriculum, we have a unique opportunity to shape the curriculum with a greater emphasis on interdisciplinary research with courses that specifically address environmental, biobehavioral and social determinants of health content known to affect risk and adverse outcomes in our most vulnerable and marginalized populations (Owen et al.,2020; Yancy, 2020).

Our ultimate goal is to prepare nurse scientists with the knowledge and skills to develop and sustain collaborations which accelerate the science and integrate the findings among individuals, families, community/health care systems, larger social systems and policies, and approaches to improve domestic and global health outcomes. We draw on lessons learned from decades of research at YSN with marginalized, acutely and chronically ill populations across the lifespan, including community-engaged nursing research (CEnR), symptom management, identifying biological and genomic mechanisms, recruitment of diverse populations, focusing on health promotion and risk reduction, addressing social determinants of health, incorporating self and family management, behavioral change strategies, and the transition from acute to chronic care phases of the health/illness trajectory.

Program Overview

Our Ph.D. Program is designed for diverse and highly qualified trainees committed to research addressing health and health threats, including approaches to reduce health inequities for marginalized and vulnerable populations.

Pre-doctoral Program Training and Career Development Activities The US nursing Ph.D. programs demand innovative thinking. In 2016, 773 nursing Ph.D.s were awarded from 135 Ph.D. programs. Ph.D. enrollments have not grown, while DNP enrollment has dramatically escalated. The duration of students in nursing Ph.D. programs averages 5.5 years, too long to supply the discipline's research needs. A number of factors influence this trend of fewer enrollments and longer durations of students in the programs including introduction of the DNP degree and limited funding for Ph.D. students (American Association of Colleges of Nursing, 2020). At YSN we have committed to a curriculum and supporting students to ward the goal of completing the program in 4 years or less, while socializing students to obtain external funding to gain grants/funding skills, and to build a foundation for a path of independent research beyond graduation.

The YSN Ph.D. program has the following goals in order to prepare nursing scientists and leaders with knowledge and competencies in: (1) application of scientific principles, theory, philosophy, and knowledge

necessary for a program of research.

(2) methodological skills to support the development of a program of research.

(3) experience in interdisciplinary learning and science.

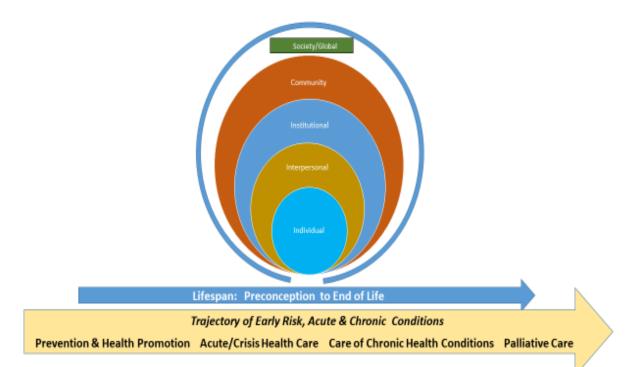
(4) translation of science for practice, leadership, advocacy, and policy applications.(5) *inclusive* pedagogy and skills in teaching the next generation of nurses and nurse scientists.

At the completion of the program, graduates will demonstrate critical thinking, grounding in scientific principles and theories of health, health equity, and disease, a capacity to conduct independent and team research, commitment to a research career, scholarly and grant writing skills, scholarly productivity (publications, presentations), and leadership roles in the context of interdisciplinary science.

The YSN Ph.D. Program requires completion of required coursework and relevant cognates to obtain a solid foundation in nursing and interdisciplinary science; master in-depth knowledge in a substantive area; critique and integrate diverse scientific perspectives; generate new ideas based on a critical evaluation of existing knowledge; conduct original research; engage in interdisciplinary learning and research; and identify implications for policy, clinical practice, and health leadership for the profession, and to address health and health inequities of populations experiencing social and structural marginalization.

We address the program educational goals with an integrated matrix of core program requirements (Table 1), relevant University wide cognate courses (Table 2), interdisciplinary training activities/collaborations, career development and leadership mentoring from dissertation advising, Graduate Research Assistant (GRA) and Teaching Fellow (TF) experiences. Our curriculum is based on the Socioecological Model (SEM) framework, which is consistent with the key themes for Ph.D. education outlined above. Course objectives, Preliminary, and Qualifying Examinations will reflect content and synthesis of SEM content and levels.

Socio-Ecological Model for YSN PhD Curriculum



SEM Level	Influences on	Research	Ph.D. Courses*
	Health	Constructs	
Society/Global	Social determinants of health including Economic structures; Health inequities; Racism & other forms of discrimination. Climate change, pandemics & epigenetics	Population health; Team science & implementation science (global reach & partnerships); Social determinants of health; Planetary health	N985 N912 N905 BIS 633a
Community	Where persons live, work or go to school with structural & environmental effects on health; Social, physical & built environment; Epigenetics	Population health, Structural & Social determinants of health; Partnerships within the community in research (CEnR), science, advocacy; health interventions & interventions to manage symptoms/chronic conditions; sleep, substance use;	N985 N912, N913 Cognates N929 N905 BIS 633a

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		ACEs; Health care	
		policies/incentives	D10 (00
Institutional	Access & health	Examination of	BIS 633a
	inequities related to	institutional influences	N905
	health care	on population health,	N929
	organizations, schools,	implementation	
	workplaces, social	science, data	
	service agencies	science/big data;	
		Group programs and	
		services,	
		Multi-level	
		interventions,	
		Institutional policies,	
		Institutional physical	
		environment	
Interpersonal	Family, friends, social	How interpersonal	N929
	networks, health care	interactions influence	N913
	providers; epigenetic	health outcomes, i.e.	Cognates
	influences on health	relationships, respect,	
		epigenetic	
		foundations, social	
		networks; ACEs &	
		development/health;	
		health interventions &	
		interventions to	
		manage	
		symptoms/chronic	
		conditions	
Individual	Biological, genetic,	PERSONS and the	N912
	socio-demographic	context of the world in	N913
	characteristics,	which they live;	N905
	cultural identity,	Population health;	N985
	symptoms, health	Social determinants of	
	status; biological &	health impact on	
	social determinants of	individuals; Toxic	
	health influencing	stress response; ACEs	
	susceptibility	Health over time;	
		Sleep; Substance use;	
		Precision health;	
		'omics;	
		health interventions &	
		interventions to	
		manage	
		symptoms/chronic	
	1	conditions	

*Statistics, Research Methods and Dissertation Seminar courses cross all levels

Notes: Social Determinants of Health Definitions: https://www.healthypeople.gov/2020/about/foundation-health-measures/Determinants-of-Health#biology%20and%20genetics [Including biological and genetic determinants of health]

"Social determinants of health include poverty, inadequate housing, underperforming schools, police brutality, mass incarceration, food deserts, joblessness and underemployment, poor access to healthcare and violence. All of these factors contribute to health inequities in our communities. And they serve as a recipe for pain, suffering, premature mortality, and civil unrest." From AnchorHealth, 2018

See also: National Institute of Minority Health and Health Disparities Research Framework, 2018

https://www.nimhd.nih.gov/about/overview/research-framework/nimhd-framework.html

Plan of Study

The SEM framework indicates levels of health needs, knowledge development, and potential scientific influence that guide our required didactic content and cognate courses. Organized by this framework, we offer courses, academic activities, and advising/mentoring that prepare students to engage in interdisciplinary science aimed at preventing, responding to, and caring for those at all levels within the SEM framework, especially those marginalized groups who are disproportionately suffering from health inequities and adverse health outcomes both domestically and globally. Common threads that will be integrated into course objectives and mentoring activities (see YSN Ph.D. Handbook and *Advising Guidelines* in development) include the following: professional career trajectories, leadership and policy applications in nursing and health care, health equity, application of principles of social determinants of health, and working against systemic social and racial injustice.

The proposed YSN Ph.D. plan of study will include core courses, as well as a broadened array of cognate course choices, to emphasize breadth of instruction and course content relevant to the SEM framework.

Table 1. Ph.D. Plan of Study 2021-2025

YEAR 1 2021-22

Fall 2021 Semester

NURS 901 Quantitative Methods for Health Research

NURS 908 Synthesis of Knowledge and Skills for Nursing Science

NURS 912 Knowledge Development for Nursing Science

EPH 505a Biostatistics for Public Health

Spring 2022 Semester

NURS 902 Qualitative Methods for Health Research

NURS 909 Nurse Scientists and Grant Writing

NURS 913 Chronic Conditions: Risk Factors, Prevention and Management of

Adverse Outcomes

BIS 505b Biostatistics for Public Health II

Page

N929 Responsible Conduct of Research

YEAR 2 2022-2023

Fall 2022 Semester

NURS 903 Multi-Method Measurement of Biobehavioral Phenomena
NURS 905 Intervention Development and Introduction to Implementation Science
NURS 906 Dissertation Seminar
BIS 633a Population and Public Health Informatics
2 Cognates

Spring 2023 Semester

NURS 904 Mixed Methods Research
NURS 907 Dissertation Seminar
CDE 534 Applied Analytic Methods in Epidemiology or STAT 660 Multivariate
Statistics
2 Cognates
Summer Intensive (June)
N985 Achieving Population Health Equity

YEAR 3 2023-2024

NURS 906/907 Dissertation Seminar Fall and Spring semesters Conduct of dissertation research

YEAR 4 2024-2025

NURS 906/907 Dissertation Seminar Fall and Spring semesters Completion and Defense of dissertation research

Completion of 15 core courses and four cognates in the student's area of specialization (including one advanced analysis course) is required. Successful completion of dissertation seminar (N906/907) years 2-4 or until dissertation is complete and successfully defended, is also required.

Table 2. Potential	Cognate Course	s Categorized by Area	a of Specialization and Content
	cognate course	S Curregormera Sy miles	a of Specialization and Content

Content Area	Course Number/Title	Description
Infectious Diseas	es	
Yale School of Public Health (YSPH)	EMD553b Transmission Dynamic Models for Understanding Infectious Diseases	Use of transmission dynamic models as tools for studying complex patterns that arise from interaction between pathogens and hostsWhy do some pathogens fail to spread effectively in a host community while others increase in prevalence before eventual elimination? Why do some infections oscillate in frequency while others occur at relatively constant levels over long periods of time? How is it possible that an intervention could perversely increase the burden of disease in the community, even as it reduces overall prevalence of infection?
YSPH	EMD 512a, Immunology for Epidemiologists	fundamentals of immunology including antigens, antibodies, methods for detecting antibodies, cells of the immune system, products of such cells, and immune mechanisms. Experience is gained in analysis of research papers
YSPH	EMD 517a/b, Principles of Infectious Diseases I/II	 A: explores the epidemiology and biology of infectious agents and the diseases they cause. Through a theme-based, integrated approach, students learn about the epidemiology, pathogenesis, prevention, and control of bacteria, viruses, and eukaryotic parasites of public health importance. Emphasis is placed on epidemiological methods, routes of transmission, host-pathogen interactions, and mechanisms of virulence. B: The course introduces new topics such as infectious causes of chronic diseases; and vector-borne, zoonotic, and emerging pathogens.
YSPH	EMD 531 Genomic Epidemiology of Infectious Diseases	This course provides an overview of how we can harness microbial evolution to study epidemiology learn the basic skills to implement next-generation sequencing and phylogenetic approaches to investigate different stages of infectious disease outbreaks[and] critically evaluate genomic epidemiology case studies to understand the applications and limitations of genomic data, what aspects can be used to inform outbreak responses, and how the information can be communicated to the public.
Health Disparities	s / Marginalized Populations / Social Determinants of H	lealth
YSPH	SBS 570b, LGBTQ Population Health	Sexual and gender minority individuals (e.g., those who identify as LGBTQ) represent a key health disparity population in the US and worldwide. Students consider social and ecological influences on sexual and gender minority health, including migration, community, and neighborhood influences Students apply lessons learned to evaluating and developing policy and health care interventions for this increasingly visible segment of the global population.
YSPH	EPH 507 Health Equity & Social Justice	This course outlines the social and structural determinants related to health inequities in the US and globally. The course explores conceptual, theoretical, methodological, and empirical approaches to understanding social justice and health equity. The course will

VODU		focus on health determinants including health care, social class, poverty, oppression and power, stigma and discrimination, neighborhood and social factors. The course takes a multidisciplinary approach, integrating methods and research from epidemiology, social sciences, and medicine. The course explores the individual, interpersonal, community, and societal influences that lead to healthy and unhealthy outcomes. Prerequisites: None
YSPH	SBS 573a, Social and Cultural Factors in Mental Health and Illness	This course is an introduction to mental health and illness with a focus on the complex interplay between risk and protective factors and social and cultural influences on mental health status The social consequences of mental illness such as stigma, isolation, and barriers to care are explored, and their impact on access to care and recovery considered.
YSPH	SBS 581a, Stigma and Health	This course engages students in conceptualizing stigma as a fundamental cause of adverse health. After reviewing conceptual models of stigma, students examine the multiple mechanisms—both structural and individual—through which stigma compromises the health of a large proportion of U.S. and global populations. Students compare individual- and structural-level interventions to reduce both stigma at its source and its downstream impact on individual health.
Yale School of Management	680E Population Health and Health Equity	The course will introduce and examine the intersections between social phenomenon, health care delivery system incentives, technological advances, patient engagement, and health outcomes across groups in the US. The tension and synergies across prevailing frameworks will be illustrated. Opportunities to innovate and advance both population health and health equity will be highlighted and identified.
YSN	N985 Achieving Population Health Equity	This intensive course offered in summer semester is open to DNP and Ph.D. students and provides a critical overview of the historical and contemporary health and health disparities research, relevant literature, and policies as essential context for understanding how to achieve health equity. The social and biological determinants of health and health disparities are also critically examined in light of political, economic, cultural, legal, and ethical issues. Selected health and health disparities population-based data are examined as a foundation for explicating how subpopulations experience disparate health across the lifespan. Students examine how past and current policies (state, federal, tribal), politics, population-based data findings, and selected frameworks enhance or act as barriers to achieving health equity with diverse populations, systems, and/or communities. Additionally, students design an organizational policy plan for achieving population health and health and health equity within a health system, organization, and/or community-based health system
YSPH	CDE 505/PSYC 657: Social and Behavioral Foundations of Health	This course provides students with an introduction to social and behavioral science issues that influence patterns of health and health care delivery. The focus is on the integration of biomedical, social, psychological, and behavioral factors that must be taken into consideration when public health initiatives are developed and implemented. The course

		emphasizes the integration of research from the social and behavioral sciences with epidemiology and biomedical sciences.
YSPH	SBS 699 Advanced Topics in Social and Behavioral Sciences	This course provides an in-depth examination of key areas in the social and behavioral sciences. For each topic, we explore a general overview of the area and noted gaps in the literature, the primary theories driving research in the area, common methods and analytic techniques, and recent research examples. Students explore topics in current and emerging areas of social and behavioral sciences including topics focusing on health care, maternal-child health, reproductive health, mental health, social determinants of health, stigma, obesity, and aging.
YSPH	CDE 545b, Health Disparities by Race and Social Class: Application to Chronic Disease Epidemiology	This course explores disparities in the chronic diseases that contribute disproportionately to ill health, resource utilization, reduced quality of life, and mortality. Taking a life course perspective as we explore disparities across the spectrum of chronic diseases, we focus on differences in health between diverse racial/ethnic and/or socioeconomic groups, primarily in the United States. The primary focus of this course is on understanding the determinants and consequences of health disparities, learning to critically evaluate health disparities research, and thinking creatively about elimination strategies.
Anthropology	Anth 651b Intersectionality and Women's Health	This interdisciplinary online seminar, designed for students in Anthropology, Women's Gender and Sexuality Studies, Sociology, African American Studies, Public Health, and related fields, explores contemporary intersectionality theory—namely, how the intersections of race/class/gender and other axes of oppression (e.g., based on religion, ethnicity, national origin, sexuality, etc.) affect women's lives, reproductive health, and well-being in the contemporary United States. In this course, Black feminist approaches to intersectionality theory will first be introduced. Then intersectionality will be explored through works that explore four broad themes: 1) The Afterlives of Slavery: Reproductive Liberty and Justice, 2) Settler Colonialism: Reproductive Politics on the Reservation; 3) Wars and Borders: Reproducing Immigrants and Refugees; 4) The Carceral State: Substances, Criminalization, and Survival. Reproduction is the key women's health issue that threads its way through these sections. But other women's health issues will also be explored in diverse time periods, contexts, and social locations throughout the US.
	ic Illness: Risk Factors, Response, Interventions	
YSPH	Elective: Patients, Populations, and Pandemics: Responding to COVID-19	Through this elective, students will 1. Demonstrate nuanced understanding of the COVID- 19 pandemic using an interdisciplinary approach. 2. Enhance clinical reasoning in a situation of uncertain and emerging evidence on clinical and epidemiological perspectives, therapeutics, and social implications for patients and the community. 3. Build synthesis skills through appraise and interpreting emerging literature during a pandemic and gain

		experience defending a position in uncertain times. 4. Create an informational platform accessible to the public
YSPH/Yale School of Medicine (YSM)	IBIBIO 530a/MCDB430a, Biology of the Immune System	This course focuses on the development of the immune system, cellular and molecular mechanisms of immune recognition, effector responses against pathogens and autoimmunity.
YSM	IBIBIO 532b, Inflammation	This course covers fundamentals of inflammation from a broad biological perspective. Both physiological and pathological aspects of inflammation will be the focus of this course.
YSPH	SBS 529a, Foundations of Behavior Change	The focus is on integration of social, psychological, and behavioral factors that must be considered in developing and implementing best clinical practice and public health initiatives. This course emphasizes use of empirical evidence from social and behavioral sciences as the basis of public health practice and policy
YSPH	CDE 572a, Obesity Prevention and Lifestyle Interventions	This course reviews the methods and evaluation of obesity prevention and lifestyle interventions conducted in multiple settings (e.g., individual, family, and community settings, as well as policy-level interventions). Topics include physical activity, nutrition, and weight-loss interventions in various populations (children, adults, those who are healthy, and those with chronic diseases). The course combines didactic presentations, discussion, and a comprehensive review of a particular lifestyle intervention by students. This course is intended to increase the student's skills in evaluating and conducting obesity prevention and lifestyle interventions.
YSPH	SBS 531a, Health and Aging	This course explores the ways psychosocial and biological factors influence aging health. Topics include interventions to improve mental and physical health; effects of ageism on health; racial and gender health disparities in later life; and how health policy can best adapt to the growing aging population. Students have the opportunity to engage in discussions and to develop a research proposal on a topic of interest.
Sociology	Soc 636b Ecology & Evolutionary Biology	This graduate seminar (with limited enrollment, but open to all graduate students at Yale, and undergraduates with permission) will cover topics at the intersection of the natural and social sciences, including behavior genetics, gene-environment interactions, gene-culture co-evolution, social epigenetics, and diverse other topics. We will focus on the ways in which our genes and our bodies are in a (short and long) conversation with our social environment. To what extent does our genetic makeup influence our behaviors? To what extent do our behaviors and social experiences influence our genes? To what extent do our genes increase or decrease our risk for particular outcomes given particular environment and the biological bases of resilience? And how does the social environment come to regulate our genome? How do social exposures reshape neural and endocrine processes? How do social exposures "get under our skin"? How are they literally embodied?

Informatics		
YSN	NURS 922 Introduction to Clinical Research Informatics	Provides an introduction to informatics, focusing on clinical research informaticsusing electronic health record (EHR) for research purposeslectures and discussion on biomedical informatics, clinical research informatics, clinical epidemiology, and data science big data storage, including relational databases as well as some of the newer approaches, data standards, metadata, and data documentation the uses of natural language processing, machine learning, data mining, and ontologies.
YSPH	BIBIS 639, Descriptive Analysis of Public Health Data	This course introduces methodology for extracting disease rates from public sources and using them to analyze temporal-spatial trends for disease. It also uses survey data on exposure to putative risk factors and results from analytical studies to quantify the extent that known etiology can account for disease trends. This information is also used to assess the impact of public health policy on disease control.
YSPH	Clinical Database Management Systems and Ontologies	This course provides an introduction to database and ontology in the biomedical domain. It will review how data and information are generated through biological and biomedical experiments and through patient care. It will introduce different approaches to representing/modeling, managing, querying, and integrating data and information
YSPH	BIS 634a Computational Methods for Informatics	This course introduces the key computational methods and concepts necessary for taking an informatics project from start to finish using APIs to query online resources, reading and writing common biomedical data formats, choosing appropriate data structures for storing and manipulating data, implementing computationally efficient and parallelizable algorithms for analyzing data, and developing appropriate visualizations for communicating health information. The FAIR data-sharing guidelines are discussed. Current issues in big health data are discussed, including successful applications as well as privacy and bias concerns. This course has a significant programming component, and familiarity with programming is assumed. Prerequisite: CPSC 223
YSPH	Introduction to Health Informatics CBB 740	Students will gain foundational knowledge in clinical information systems, health data standards, electronic health records and data security/privacy issues, among other areas. Students will survey a variety of informatics subfields including research, laboratory/precision medicine, imaging, and artificial intelligence applying these ideas in real-world contexts.
	Advanced Research Methods	
YSPH	BIS 621a, Regression Models for Public Health	This course focuses on the applications of regression models and is intended for students who have completed an introductory statistics class but who wish to acquire the additional statistical skills needed for the independent conduct and analysis of study designs frequently seen in public health. Topics include model selection, implementation and interpretation for linear regression with continuous outcomes, logistic regression with

YSPH	BIS 623a, Advanced Regression Models	binary/multinomial/ordinal outcomes, and proportional hazards regression with survival time outcomes. The class explores advanced topics within these domains including the analysis of (1) blocked and nested study designs, (2) linear contrasts and multiple comparisons, (3) longitudinal data or repeated measures, (4) missing data, and (5) pragmatic clinical trials using propensity scores to reduce selection bias, etc. This course provides a focused examination of the theory and application behind linear regression. Topics include linear regression, estimation, hypothesis testing, regression diagnostics, analysis of variance, adjusting for covariates, transformations, missing data,
YSPH	BIS 628b, Longitudinal and Multilevel Data Analysis	and generalized linear models. This course covers methods for analyzing longitudinal data in which repeated measures have been obtained for subjects over time and for analyzing multilevel data, which can be either hierarchically or nonhierarchically structured, e.g., nested, crossed, and/or clustered. The course teaches the common analytic techniques that can be used to analyze both longitudinal data and multilevel data with both continuous and discrete responses. Emphasis is on mixed-effects models and generalized estimating equations (GEE). Rationales on whether population-average research or subject-/cluster-specific inference research may be more appropriate for various study designs and data types are discussed and illustrated.
Implementation Sc	ience	
YCIS/YSPH	Implementation Science EMD 533	This course will provide an introduction to the use of implementation science to systematically identify barriers and facilitators to delivery of evidence-based practices. Participants will learn the language of implementation science to describe key concepts and methods for translating scientific evidence into practice, including: community engagement, mixed-methods research, theories of behavior change, measurement and study design for evaluation, frameworks for implementation and evaluation, and pathways for dissemination. Implementation science is an exciting and rapidly emerging field whose approach offers broad and novel insights into the gaps between knowledge and practice in public health.
YCIS/YSPH	Advanced Topics in Implementation Science Yale Center for Implementation Science (Post-doctoral fellows)	This course will explore advanced topics in implementation sciencewith a presentation of focal topic content in an interactive format, with critical thinking and discussion around theories, concepts and research tools[then] a case study to illustrate key concepts and challenges in conceptualization and implementation of studies using advanced methods.
Community Health		
School of the Environment (formerly FE&S)	F&ES 721a/EVST 333/HLTH 332 Climate Change Adaptation; Resilience and Resistance in Global Health	Environment and health-centered activities resulting from thoughtful, interdisciplinary approaches and audits will be held as the ideal among various adaptive responses. Scope will include but not be limited to food, energy and water security as well as the readiness of health systems in the U.S., Latin America, Asia and the Caribbean.

Sociology Department	SOCY 632 Social Network Analysis	Social Network Analysismethodological techniques "structure" emerges as a persistent pattern of interaction that can influence a multitude of behaviors, such as getting a job, income attainment, political decision-making, social revolutions, organizational merges, global finance and trade markets, delinquent youth behaviors, the spread of infectious diseases
YSPH	CDE 551b, Global Noncommunicable Disease	This course focuses on the contemporary burden of noncommunicable diseases (NCDs), with a particular focus on the health impact of NCDs in low- and middle-income countries. The first part of the course briefly covers the etiology and global distribution of four key NCDs: cardiovascular disease, cancer, chronic respiratory disease, and diabetes. We then discuss the shared behavioral, metabolic, and physiologic risk factors for these diseases and explore how NCDs are associated with economic development, globalization, and the demographic and health transitions. The second half of the course focuses concretely on approaches to NCD intervention, from individual-level approaches to coordinated global action. The last five lectures are by guest speakers offering insight into the successes and challenges of their own intervention attempts.
School of the Environment (formerly FE&S)	F&ES 721a Environmental Justice/Climate Justice	In this seminar, we will focus on the evolution and development of the environmental justice movement. We will pay particular attention to its embrace of climate justice, and we will ask what conception of justice is at play in both the environmental justice and climate justice movement. We will begin with a legal and social-historical survey but will quickly bring the inquiry up to the current moment. We will explore the legal and policy developments that have followed the environmental justice critique. I will expect students to choose a particular movement (or one expression of it) and write a paper bringing to bear all of the questions we raise in the seminar. (For example, how did opposition from environmental justice advocates lead to a reformed climate change initiative in California? Or What is the genesis of the Sunrise movement and what legal or policy changes would be required to make it a reality.)The paper need not focus on a domestic response, because the environmental/climate justice critique is now global.
Policy		
YSPH	EPH 510 – Introduction to Health Policy and Health	
	Care Systems	
YSPH	HPM514 HEALTH POLITICS, GOVERNANCE AND POLICY	

I. <u>Fellowships</u>

A. Graduate Research Assistant Experience

During the first two years of the program, students are Graduate Research Assistants (GRAs) with faculty mentors and participate in the mentor's ongoing research. The purpose of the experience is to enhance the research training of doctoral students through participation in on-going research of one or more graduate faculty members and contribution to these research projects.

Each doctoral student is required to complete a minimum of four semesters of a Graduate Research Assistant experience. Students are expected to devote approximately **15 hours per week** to their Graduate Research Assistant activities for a total of 46 weeks (690 hours) per 12 months to their GRA activities. The GRA schedule and vacation times (4 weeks per year) are negotiated with the GRA mentor. The Graduate Research Assistant requirement can be met by the student while participating in the on-going research of any graduate faculty member. A student may do the entire research assistantship with one faculty research project or be involved with more than one project.

The actual Graduate Research Assistant experience is developed by the student with the research mentor and the Co-Chairs of the Ph.D. Program. This experience may or may not be related to the student's research area of interest. The experience should build upon the prior research expertise of the student and facilitate the accomplishment of goals as defined by the student and mentor. Graduate Research Assistant work may consist of library work, data entry and analysis, data collection, preparation of IRB applications, grant proposal writing, abstract preparation, poster development, and manuscript preparation. All of these activities are essential tools of the researcher and are viewed as an important aspect of Ph.D. education.

The student is responsible for submitting a written plan (including measurable objectives) for meeting the requirement that has been approved by the mentor, to the Co-Chairs of the Ph.D. Program no later than the end of the first month of each semester. The student and the mentor are responsible for submitting an evaluation of the experience to the DGS(s) at the end of the GRA experience <u>each semester</u>. If there are issues that create tension between the student and GRA adviser, the Ph.D. Co-Chairs will assist with negotiating resolution. If there are any changes in the plan, the student must notify the Co-Chairs of the Ph.D. Program.

EXAMPLE: Graduate Research Assistantship Goals and Objectives

My Graduate Research Assistantship will be completed under the direction of (<u>insert faculty member's name</u>) during the _____ semester of year _____. The goals and objectives for my research assistantship are as follows:

[NOTE: The following serve as examples only and may not be appropriate for all students. Goals and objectives should be directed toward the student's area of research interest, expertise, and level of professional development].

- To review the literature in the area of _____.
- To participate in grant proposal development, including the formation of specific aims, _____.
- To assist with recruitment of ______ subjects in _____ settings.
- To evaluate the instrument _____ on a sample of _____.
- To participate in data entry and analysis, including the use of ______ software programs.
- To prepare a manuscript for submission in a peer reviewed, professional nursing journal.
- To submit a research grant proposal for funding from _____.

B. <u>Teaching Fellowship Experience</u>

Yale's Graduate Teaching Fellow Program (https://gsas.yale.edu/academicrequirements/teaching-fellows-requirements) is designed to provide pedagogical apprenticeship experience for graduate students. Teaching Fellowships provide students with the opportunity to develop teaching skills through active participation in the teaching of courses and through access to the resources of the Poorvu Center for Teaching and Learning. Two terms of a Teaching Fellowship are required. Typically, Teaching Fellowships are completed during the third and/or fourth year of Ph.D. study, after required courses have been completed. YSN Teaching Fellows usually participate in teaching master's level courses such as statistics, health assessment, pharmacology, population health and a variety of clinical courses.

The student is responsible for attending the GSAS Teaching at Yale session held for all Teaching Fellows during orientation week and submitting a written plan (including measurable objectives) for meeting the requirement that has been approved by the faculty mentor, to the Co-Directors of the Ph.D. Program no later than the end of the first month of each semester. The student and the mentor are responsible for submitting an evaluation of the experience at the end of the Teaching Fellowship experience each semester to the Co-Directors of the Ph.D. Program. If there are any changes in the plan, the student must notify the Co-Directors of the Ph.D. Program.

Faculty members responsible for the courses with Teaching Fellows closely monitor their teaching experiences. Faculty members prepare course syllabi,

lectures, assignments, and examinations and are responsible for administrative course activities such as placing course materials on Canvas

Teaching Fellows might be provided an opportunity to give a lecture or part of a lecture with supervision. If the student gives a lecture in the course, the faculty member attends and evaluates the student's performance.

The faculty member meets with the student weekly to discuss the teaching activities and ensure that the student participates in all relevant aspects of the teaching experience to meet his or her objectives.

The Poorvu Center for Teaching and Learning offers programs, individual consulting, and teaching resources. Teaching Fellows are urged to attend seminars and workshops offered by the Poorvu Center. https://gsas.yale.edu/resources-students/teaching-support-development. Teaching Fellows are also encouraged to complete the Certificate of College Teaching Preparation (CCTP) offered at the Poorvu Center.

A. <u>Preliminary Examination</u>

The Preliminary Examination is intended to allow the student to demonstrate mastery of doctoral coursework in nursing science, research methods, and statistics. The examination provides students with the experience of synthesizing the required coursework and it provides faculty with information about the student's knowledge base, ability to synthesize knowledge and ability to present ideas cogently. Specifically, the purposes of the preliminary examination are to:

- Provide a stimulus for thinking and reflection about nursing science after a year of coursework;
- Synthesize and integrate across domains of knowledge, including the use of critical thinking and logical description of phenomena from multiple perspectives;
- Advance the development of the dissertation proposal;
- Foster the development of scholarly written communication, including logical idea progression, clarity, and synthesis by completing a grant proposal.

The Preliminary Examination is taken in June <u>after</u> the first year of required core coursework has been completed (a grade of High Pass or better in each core course is required as well as at least one grade of Honors in the first year). **Passing the Preliminary Examination is a prerequisite for continuing in the second year of doctoral study**.

Preliminary Examination Process

The Preliminary Examination is a written, examination that is scheduled at the close of the first year.

- The examination due date will be scheduled by the end of the spring semester. Extensions, such as those due to acute illness or family emergencies, must be communicated to and approved by the Co-Directors of the Ph.D. Program. If approval is given, the student must arrange with the Co-Directors of the Ph.D. Program an alternative due date for the examination.
- The examination consists of the development of a grant proposal in the format of the NIH F31 Training grant. Guidelines will be provided to students 3-4 weeks before the exam due date.
- At least two members of the faculty appointed by the Co-Directors of the Ph.D. Program read and grade the preliminary exam. Grading is blind; students are given ID numbers and instructed to not put any identifying information on the examination. The student will receive a grade of Pass or Fail. Any differences in grades are decided by the Co-Directors of the Ph.D. Program.
- Students who are not successful in passing the examination will be provided with guidance in the area needing strengthening and must resubmit a revised grant within one week. Failure to pass the examination the second time will result in dismissal from the Ph.D. Program.

B. **Qualifying Examination**

The Qualifying Examination usually takes place after the completion of the second year of study, and preferably by the end of the fifth semester, when required coursework is completed. The Qualifying Examination must be successfully completed by the end of the 6th semester. Failure to complete the Qualifying Examination by the end of the 6th semester will result in Academic Probation. Failure to complete the Qualifying Examination by the end of the 7th semester will result in dismissal from the program.

Students' advisers may request exceptions for a Qualifying Exam prior to the completion of the second year of study by submitting a letter to the DGS describing the basis for the request, readiness for the exam, and for completing the dissertation by the end of the third or fourth year.

Proposal Development and Qualifying Examination

The student prepares a comprehensive proposal describing the dissertation and the rationale for decisions about the conceptual framework, design, methods, and plans for analysis. The dissertation proposal is the basis for the Qualifying Examination (described above), which entails an oral presentation and defense of the proposal. The dissertation proposal is a formal study prospectus, which describes the clinical problem and the design and methods of investigation. The format for the proposal may vary based on the nature and the design of the research. The proposal typically includes:

- Statement of clinical problem and study purpose
- Conceptual underpinnings
- Review and synthesis of relevant literature
- Research questions and/or hypotheses
- Research Design
 - o Setting and sample
 - o Instruments
 - o Procedures
 - Plans for analysis
 - o Limitations
 - o Potential implications for practice, research and policy

Students must register for QUAL999 in the semester in which they are preparing to take their qualifying examination, ONLY if they are not registered for any other courses that semester. 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 involves a defense of the proposal, as well as addressing questions pertaining to content in courses that justify choices made in preparing the dissertation proposal.

Qualifying Examination Process

- A hard copy or electronic copy of the proposal is distributed to the student's Dissertation Chair and two members of the Dissertation Committee who determine whether the proposal is ready to be defended. After any required revisions are completed, the Qualifying Examination is scheduled.
- The revised proposal is then distributed to the Chair, members of the Dissertation committee, and two Readers at least 2 weeks prior to the scheduled Qualifying Examination.

- The Chair of the Dissertation Committee chairs the Qualifying Examinations which typically lasts 1 to 1.5 hours.
- The examination is not open to the public. The student gives a formal presentation of no more than 20 minutes of the proposed study and answers questions regarding the research and related topics.
- Immediately following the student's presentation and discussion, the Committee and Readers meet to determine the outcome of the Qualifying Examination (Pass, Pass with Revisions, Fail) and communicate the outcome to the student.
- Successful completion of the Qualifying Examination and successful completion of all required Ph.D. courses are required for candidacy for the Ph.D. degree.
- There are several forms that need to be completed. The YSN Qualifying Examination Form is completed by the student/committee Chairperson (Pass, Pass with Revisions, or Fail) and given to the Co-Directors of the Ph.D. Program along with a hard copy or PDF of the approved proposal. Once the student successfully completes the Qualifying Exam, and has successfully completed all required courses in the first two years of the Ph.D Program, the Co-Directors of the Ph.D. Program will submit the Qualifying Examination Form, a copy (hard copy or PDF) of the approved proposal, (https://registrar.yale.edu/sites/default/files/qualifying_examination_prospec tus_certification_combined_program.pdf) and the Admission to Candidacy Certification Form (https://registrar.yale.edu/sites/default/files/admission_to_candidacy_certific
 - ation_combined_program.pdf) to the University Registrar's Office.
- If the student fails the Qualifying Examination, he or she has the opportunity to re-take it 2 to 6 months after the initial Examination (after a revised written proposal has been submitted and a second oral Examination scheduled). If a student fails the second Qualifying Examination, he or she will not be able to progress in the program.
- If the student has not passed the Qualifying Examination and been admitted to candidacy, he or she will not be allowed to register for the Fall term of the fourth year. If there are unusual circumstances, the Co-Directors of the Ph.D. Program may request permission from the associate Dean of the Graduate School for the student to register. The student will then be on Academic Probation until admitted to candidacy.

C. <u>Final Oral Examination</u>

Each student must complete a dissertation under the direction of an adviser and two other graduate faculty members. The dissertation research involves the generation of new knowledge that will contribute to nursing science (see Appendix A). The Final Oral Examination is based on the dissertation and should occur in the 4th year. It is intended to allow the student to demonstrate mastery of a specific field of nursing science and excellence in conducting an independent research project. Passing of the Final Oral Examination admits the student to the degree. Successful completion of the Final Oral Examination is required before the Ph.D. can be awarded.

Final Oral Examination Process

When the committee agrees that the dissertation is suitable for a final defense, the Committee Chair notifies the Co-Directors of the Ph.D. Program. The student and Dissertation Chair work with the Registrar of the Ph.D. Program to schedule the final oral examination, which is open to the public. Students need to provide the name, title, institutional department, email address, phone number, net ID, and street address of all committee members and readers. The Final Oral Examination typically lasts 1.5 to 2 hours.

The following guidelines apply to the scheduling and conduct of the final oral examination:

- A hard copy of the dissertation is distributed to the committee at least 2 weeks before the final oral exam. (Electronic submission is acceptable during any pandemic crisis).
- The Chair of the Dissertation Committee conducts the final oral examination and all committee members and readers must be in attendance.
- The student gives a 20-30 minute formal presentation of the dissertation and answers questions asked by all those in attendance committee members, readers and others.
- Immediately following the student's presentation and ensuing discussion, the committee meets to determine the outcome of the final oral examination. Neither the student nor others who attended the defense are present for this part of the defense discussion.
- The student is informed of the outcome of the meeting pass, pass with minor revisions, pass with major revisions, fail immediately after the committee meets.

• Upon completion of the revisions to the dissertation, the Registrar will complete the Readers Form and submit it to the University Registrar's Office.

After the student submits the Dissertation Submission Package to the Dissertation Submission Office, dissertation committee members and readers will receive an email from the Dissertation Submission Office containing a link to a web-based tool to open, save, and submit their reader's reports.

II. <u>Dissertation</u>

The dissertation entails an original research project that demonstrates the student's mastery of relevant knowledge and methods. The originality of the dissertation may consist of the discovery of significant new information, the development of new methods or theories, the testing of a new intervention, or the achievement of a new synthesis. Given the diverse nature of nursing research, dissertations address a wide range of topics and draw on a variety of research designs and methods. The value of the dissertation depends on the significance of the problem, quality of the design, rigor of execution, and clarity of its exposition.

Undertaking the dissertation is a process that unfolds during the course of doctoral study. Through course work and ongoing consultation with faculty mentors, students refine their area of interest, immerse themselves in the literature on their chosen topic, and develop the methodological skills necessary to carry out their proposed study. Key aspects of the process include selecting and working with the dissertation committee, successfully completing the Preliminary Exam, writing and successfully defending the dissertation proposal (Qualifying Examination), and carrying out and successfully defending the completed dissertation (Final Oral Examination).

In consultation with their faculty adviser and members of the dissertation committee, students should give serious thought to the scale of the proposed dissertation topic. There should be reasonable expectation that the project can be completed in two years. The dissertation is meant to set the stage for a lifetime program of research. The quality of the investigation should lend itself to publication(s) in a refereed journal.

The dissertation may be formatted in the **Traditional** format or the student may obtain permission from the Dissertation Chair for a **Publication** option (see Appendix A & B). There is an ethical responsibility to research subjects to disseminate the results of a study in which they participate. To facilitate student scholarship, we encourage students to use the publication option for the dissertation. The Yale University Graduate School of Arts and Sciences supports the use of published materials as part of the doctoral dissertation if it is approved by the student's Dissertation Committee and the Graduate School.

Dissertation Committee and Graduate School 'Readers'

The Dissertation Committee is the primary source of advisement and consultation for the student during all phases of the research process (conceptualization, collection and analysis of data, interpretation of findings) and completion of the written dissertation. The Dissertation Committee includes a chairperson and two committee members with complementary expertise. The Committee Chairperson and members need to be tenure-track faculty at Yale (or the equivalent). One committee member may be external. Two additional readers for the dissertation are also required. Of the YSN committee members and readers, two must be YSN faculty (this can include the Chair) and two must be faculty of the Graduate School of Arts and Sciences.

Upon completion of the Final Oral Examination at YSN, the dissertation needs to be submitted to the Graduate School. The Graduate School requires three 'readers' to provide a written evaluation on the quality of the dissertation and its contribution to science. These 'readers' are selected from your dissertation committee/readers who participated in your dissertation oral examination. Two of the readers need to be faculty of the Graduate School of Arts and Sciences at Yale. All Graduate School 'readers' must hold the Ph.D. or M.D. degree as well as a faculty position or be considered otherwise qualified to evaluate the dissertation. The process for assigning Graduate School 'readers' is determined by the Dissertation Chair and Co-Directors of the Ph.D. program. As mentioned, Graduate School 'readers' are usually chosen from the Dissertation Committee and readers who participated in the Final Oral Examination. The Chair of the Dissertation Committee may serve as a Graduate School reader.

Undertaking the Dissertation

The approval of the proposal at the Qualifying Examination serves as a written agreement between the student and the committee regarding the expectation, limitations and scope of the dissertation project. If there are modifications to the proposal following the Qualifying Examination, these must be agreed to by the student and the committee. Successful completion of the Qualifying Examination is a prerequisite for submission of an application to the YSN Human Subjects Research Review Committee. **Under no circumstances should data collection begin prior to successful defense of the proposal and the approval of the human subjects' application**. In many cases, it is highly desirable to conduct a pilot study prior to beginning data collection for the dissertation.

Human Subjects Review

All research involving human subjects must be reviewed and approved by one of the Institutional Review Boards (IRBs) at Yale. Yale University maintains an integrated human research protection program (HRPP) under the oversight of the Associate Vice President for Research Administration. The HRPP is responsible for ensuring that faculty, students, and staff adhere to the highest ethical standards in the protection of human research participants.

For further information on the Yale HRPP, visit their website at: <u>https://your.yale.edu/research-support/human-research</u>. Information about submitting a protocol can be found at: https://your.yale.edu/research-support/human-research/protocol-builder.

These websites are updated regularly so please check before completing any forms to be sure that you are using the most current version.

Data Collection and Analysis

Data may be obtained from a variety of sources and a variety of locations; their acceptability is judged on the basis of relevance to the research questions and/or hypotheses to be tested. Data do not need to be collected by the student personally; the appropriateness of using another person or persons to collect data is determined by the design. If another person or persons are used for data collection, the student is responsible for training and supervision of data collectors in so far as this is possible given the circumstances of the study. An existing data set can be used if appropriate.

Data analysis is to be carried out by the student. The plan for data analysis shall be such that assumptions underlying the use of all statistical procedures be met or their violation justified. It is possible that additional hypotheses, research questions and proposed procedures for analysis may be generated during the processes of data collection and analysis and that attention may be given to these within the dissertation. The Dissertation Committee should be consulted prior to work on these emergent areas.

Working with the Committee and the Final Oral Examination

The student works closely with the Dissertation Committee throughout the process of data collection and analysis. Different members of the committee are likely to fill differing roles based on differing areas of expertise (e.g., content versus methodological expert). Therefore, the student is expected to meet with the Dissertation Chair approximately every other week during the dissertation phase. The student is also expected to meet with the Dissertation Committee members regularly (usually monthly or bi-monthly) during the dissertation phase. These meetings can be individually or as a group. When the dissertation adviser and the student agree that there is a well-developed draft of the dissertation, a "working meeting" of the Dissertation Committee is recommended to be scheduled. The intent of this meeting is to obtain the collective input of the Committee members regarding all aspects of the dissertation. The "working meeting" assures that all Committee members are in agreement about additional work that needs to be done on the dissertation (e.g., additional analyses, greater synthesis of the literature, and expansion of the discussion). By having a "working meeting" prior to the formal final defense, the student and the committee have an opportunity to clarify assumptions and expectations. The "working meeting" serves to avoid unexpected surprises at the final defense. The final written dissertation should be submitted to all Committee members and readers at least 2 weeks prior to the Final Oral Examination.

Registration for Dissertation Hours (DIS 999)

Once students have been admitted to candidacy and are doing a majority of the dissertation research, they should register for DISR 999. If they are doing the research away from Yale, they need to register for DISA 999 (absentia) instead. When students are registered for DIS 999 they must complete a Dissertation Progress Report (DPR) [Dissertation Progress Report(DPR)], with consultation with the adviser, upon entry into candidacy and annually in April. This progress report is reviewed by the student's Adviser, the Co-Directors of the Ph.D. Program at YSN, and the Associate Dean of the Graduate School.

Guidelines for Dissertation Submission

Students should review the information provided by the Dissertation Office of the University Registrar's Office for information concerning the submission of dissertations. The process is becoming all electronic and some changes may occur every term. Students are encouraged to check with Barbara Withington (barbara.withington@yale.edu), who staffs the Dissertation Office for updated directions.

The deadline for dissertation submission are usually the beginning of October (for December graduation) and mid-March (for May graduation).

Students have several options for electronic archiving and publication through ProQuest. Each of these involve an out-of-pocket expense. Students are encouraged to talk with their librarian or dissertation Chair about these options.

Based on the options the student chooses, the student's bursar account will be charged. If the student is no longer registered, payment may be made by check or money order payable to Yale University at the time of submission.

The Notification of Readers Form must be completed by the department and signed by the DGS. This refers to the three Committee members or YSN readers who will be 'readers' for the Graduate School of Arts and Sciences. The **Notification of Readers Form (online)** must include the following information:

- Student's full name
- Student Identification Number (SID)
- Department
- Director(s) of dissertation
- Title of dissertation
- Term of dissertation submission
- Names of Committee members, readers, including their titles, institutions, and addresses

Please note that if it is necessary to mail a dissertation to a reader off-campus, FedEx requires a street address and phone number. FedEx will not deliver packages without an address and phone number.

Checklist for Ph.D. Program Requirements

Attainment of a Ph.D. degree requires successful completion of the following (see handbook for additional information regarding each requirement):

- *I* Nursing science major course work and seminars
- ☑ Cognate minor course work (4-6 courses including advanced analytic course and policy course[recommended])
- Graduate Research Assistantship (4 semester minimum)
- *i* Teaching Fellowship (2 semester minimum)
- **Preliminary examination**
- **☑** Candidacy/Qualifying examination
- **Dissertation** (Traditional or Publication option)
- **☑** Final Oral Examination

GSAS procedure for documenting that a Ph.D. student has completed all doctoral program requirements (prior to awarding of the degree- May or December)

All communication about students' status regarding degree requirements should come directly from GSAS Registrar. Students request these letters from the GSAS Registrar (Claudia Schiavone) if they are needed for employers or postdoctoral fellowship programs. The GSAS Registrar can send a letter on the student's behalf at two points in time to document that the student has completed all requirements for the degree; stipulating that the actual Ph.D. degree is conferred by the Corporation either in May or December.

When the final dissertation is submitted to the registrar and all readers' grades are submitted, the Registrar can send a letter to the post doc/employer stating that the student has completed all requirements and

that the student will receive the degree in (May or December); this is the "strongest" letter on behalf of the student OR

When the dissertation is submitted to the Registrar and readers' grades are not yet in, the Registrar can send a letter stating that the Dissertation is under review and *if accepted* the student will receive the degree (May or December).

Sample Plan of Study

Year 1

Fall

NURS 901 Quantitative Methods for Health ResearchNURS 908 Synthesis of Knowledge and Skills for Nursing ScienceNURS 912 Knowledge Development for Nursing ScienceEPH 505 Biostatistics in Public Health

Graduate Research Assistant Experience

BE THINKING ABOUT....

Program of Study--

<u>Who</u> are the key people you need to meet and talk with in those areas?
<u>What</u> is your cognate area of study?
<u>When</u> and what courses you will need?
<u>How</u> to discuss your program planning with your academic adviser regularly?

CONSIDER which professional meeting(s) you may attend this academic year?

Spring

NURS 902 Qualitative Methods for Health Research
NURS 909 Nurse Scientists and Grant Writing
NURS 913 Chronic Conditions: Risk Factors, Prevention and Management of
Adverse Outcomes
BIS 505 Biostatistics in Public Health II
N929 Responsible Conduct of Research

Graduate Research Assistant Experience

PLAN TO SUBMIT PROPOSAL(S) FOR FUNDING...

Preparing for the Preliminary Exam (taken at the beginning of summer)

Apply for NRSA (F 31) or other funding (Due dates: December, April, August)

PLAN TO ATTEND Eastern Nursing Research Society's (ENRS) National Conference. This is a great place to meet and talk with the researchers whose work you have been reading. And it is a great opportunity for you to get experience with poster and podium presentations. Plan to submit abstracts of your course papers or research assistantship projects. Additional meetings to consider are the Council for the Advancement of Nursing Science (CANS) annual meeting, and professional organization meetings in the area of the student's research.

Ph.D. Goals	Benchmark
Synthesis of knowledge	Demonstrate effective writing skills Maintain required grades per Graduate School and YSN Ph.D. Handbook* Identify cognate courses and plan of study to support dissertation Pass preliminary exam
Gain research expertise	Complete GRA experience (15 hours per week for 46 weeks) Regular meetings with GRA supervisor/research team ~ every 2weeks Attend relevant lectures, seminars, and workshops as part of GRA experience
Independent research	Identify research area of interest/dissertation topic Regular meetings with adviser ~ every 2 weeks Contact faculty at Yale (i.e., YSN, PH, Medicine) and leaders in area of research Submit NRSA or other grant proposal to support dissertation Submit Annual Progress Report to Progression Review Committee
Leadership	Attend ENRS, CANS, and/or national meeting related to research interests Submit abstract to ENRS, CANS or national meeting Participate in Doctoral Colloquium and YSN Scholar Day
Disseminate knowledge	Submit at least 1 paper for publication

Benchmarks Ph.D. Program – Year 1

* a) Honors in 2 full-time graduate core courses; b) HP in all core courses in Year 1; and
c) Maintain HP average for all courses

Year 2

<u>Fall</u>

NURS 903 Multi-Method Measurement of Biobehavioral Phenomena
NURS 905 Intervention Development and Introduction to Implementation Science
NURS 906 Dissertation Seminar
BIS 633a Population and Public Health Informatics
2 Cognates

Graduate Research Assistant Experience

SELECT Dissertation Committee Chair, begin work on dissertation proposal

Choose cognates that will assist you in your research. Independent studies are also appropriate.

CONSIDER which professional meeting you may attend this academic year. Prepare abstract for presentation at a professional meeting.

NRSA due date: December Spring

NURS 904 Mixed Methods Research
NURS 907 Dissertation Seminar
CDE 534 Applied Analytic Methods in Epidemiology or STAT 660 Multivariate
Statistics
2 Cognates
Summer Intensive (June)
N985 Achieving Population Health Equity

Graduate Research Assistant Experience

CONTINUE to work on dissertation proposal

TALK with your committee about expectations. Develop detailed timelines and to-do lists.

It's not too late to submit for funding opportunities!!!

Ph.D. Goals	Benchmark	
Synthesis of	Maintain required grades per Graduate School and	
knowledge	YSN Ph.D. Handbook	
	Demonstrate progress toward Qualifying Exam	
Gain research	Complete GRA experience (15 hours per week for 46	
expertise	weeks)	
	Regular meetings with GRA supervisor/research team	
	~ every 2weeks	
	Attend relevant lectures as part of GRA experience	
Independent research	Finalize Specific Aims for dissertation	
	Regular meetings with adviser ~ every 2 weeks	
	Select Dissertation Committee	
	Submit goals and timeline for Dissertation Proposal	
	defense to adviser and Ph.D. Co-Directors	
	Submit/revise NRSA or other grant proposals to	
	support dissertation	
	Submit Annual Progress Report to Progression	
	Review Committee	
Leadership	Attend ENRS, CANS, and/or national meetings in area of research.	
	Submit abstract to ENRS, CANS or national meeting	
	Participate in Doctoral Colloquium and YSN Scholar Day	
	Maintain membership in professional organization(s)	
	Provide service to Yale University/YSN or	
	Professional Organization	
	International students – meet the Graduate School's	
	oral English proficiency requirement (i.e., waiver at	
	the time of admission or testing by the Center for	
	Language Study's English Language Program).	
	Students who have not met the school's oral English	
	proficiency standard must enroll and participate in at	

Benchmarks Ph.D. Program – Year 2

	least one ELP course per term until the requirement is satisfied.
Disseminate knowledge	Submit at least 1 paper for publication

Year 3

Fall

NURS 906	Dissertation Seminar
QUAL 999	Qualifying Exam Preparation

Teaching Fellowship

Prepare for Qualifying Examination (Defend dissertation proposal). Your goal should be to complete you Qualifying Examination by the end of this semester of by March of the Spring semester.

BE THINKING ABOUT....

Applications for Postdoctoral Fellowships- Discuss with mentors

Spring

NURS 907	Dissertation Seminar
QUAL 999	Qualifying Examination Preparation

OR

NURS 999 Complete Dissertation

Teaching Fellowship

BE THINKING ABOUT....

Applications for Postdoctoral Fellowships- Discuss with mentors

*****July**—DEADLINE FOR THE QUALIFYING EXAMINATION (Proposal Defense)*** Ideally, the dissertation proposal is completed by the end of the fall term in the 3rd year of study. The dissertation proposal must be completed by the end of the 3rd year of study (July). Failure to complete the Qualifying Examination by July will result in Academic Probation and will require approval of the Dean of the Graduate School to register for the next academic year. Failure to complete the Qualifying Examination by the end of the 7th semester will result in dismissal from the program.

Benchmarks Ph.D. Program – Year 3

Page 47

Ph.D. Goals	Benchmark	
Synthesis of knowledge	Maintain required grades per Graduate School and	
	YSN Ph.D. Handbook	
	Pass Qualifying Exam	
Gain research expertise	Attend relevant lectures, seminars, and workshops	
Independent research	Regular meetings with Dissertation Committee~ 1-2 times per semester Complete online Dissertation Progress Report	
	Revise NRSA or other grant proposal	
	Complete Annual Progress Report to Progression Review Committee	
	Begin to explore post-doctoral mentors/opportunities	
Leadership	Attend ENRS, CANS and/or national meeting in area of research.	
	Submit abstract to ENRS, CANS or national meeting	
	Participate in Doctoral Colloquium and YSN	
	Scholar Day	
	Maintain membership in professional organizations	
	Provide service to University/YSN or Professional Organization	
	Complete Teaching Fellowship	
	Request Graduate Teaching Center consultation	
	for teaching evaluation	
Discominato knowledge	Submit at least one manuscript for publication	
Disseminate knowledge	Submit at least one manuscript for publication	

Year 4

Fall

DISR 999 Work on dissertation

BE THINKING ABOUT.... Applications for Postdoctoral Followships Disc

Applications for Postdoctoral Fellowships- Discuss with mentors

<u>Spring</u>

NURS 999 Complete dissertation

Final Oral Examination

Ph.D. Goals	Benchmark			
Synthesis of knowledge	Revise literature review for Dissertation as needed			
Gain research expertise	Attend relevant lectures, seminars, and workshops			
Independent research	 Regular meetings with Dissertation Committee~ 1-2 times per semester Complete online Dissertation Progress Report Defend dissertation (Note deadlines for December and May degrees) Submit applications for Post-doctoral Fellowships or employment 			
Leadership	Submit abstract to ENRS, CANS or national meeting Participate in Doctoral Colloquium and YSN Scholar Day Maintain membership in professional organizations Provide service to University/YSN or Professional Organization			
Disseminate knowledge	Submit 1 paper for publication			

Benchmarks Ph.D. Program – Year 4

Vacation Time for Students.

In this full time 12-month program, Ph.D. students are provided vacation time during all Holidays and University Breaks when the University is closed (Thanksgiving and Winter Break). Recess days (Fall and Spring recess) are not considered vacation days. An additional 4 weeks per year of vacation time may be scheduled with advanced notice and approval of the adviser and research team. Students' vacation time cannot interfere with Teaching Fellowship responsibilities.

HIGHLY RECOMMENDED PROFESSIONAL DEVELOPMENT EXPERIENCES

The required experiences described above are designed to develop expertise in a selected area as evidenced by the student's ability to conduct research, communicate information to a variety of audiences, and provide service to the profession and community. Success involves the combined efforts of the student,

adviser, and all involved in the Ph.D. Program. Other experiences that may also enhance development of the Ph.D. student are <u>highly recommended</u>:

- Paper or poster presentation at a scientific conference
- Attendance at research conferences (e.g., ENRS, CANS)
- Submission of a research grant application

Examples of funders: NRSA, Sigma Theta Tau, private foundations

• At least two manuscripts in a publishable format, one of which is data-based

Example: collaborative works that arise from ongoing research undertaken as part of a course or research with faculty, from work as a Graduate Research Assistant, or as an individual effort

• Service to the university, school and profession

Examples: hosting potential students, participating in fundraising or recruitment, serving as a graduate student representative on a school (e.g., YSN Executive, Ph.D. Program) or university committees

• Professional membership

Examples: Sigma Theta Tau, American Nurses Association, specialty organization such as Oncology Nursing Society, Association of Nurses in AIDS Care, American Heart Association, American Association of Critical Care Nurses

FUNDING FOR PH.D. STUDENTS

Funding for your time at Yale may come from a variety of sources, and students should refer to the GSAS website for updated funding information.

Ph.D. Students at YSN are strongly encouraged to seek funding through research grants from external agencies as a means of benefiting both their current work and their future career prospects. New funding opportunities continually emerge and students are encouraged to track new funding sources. Students are expected to work closely with their adviser to develop proposals for external funding. Additionally, students are required to inform the Co-Directors of the Ph.D. Program of plans for external funding and have all proposals for external funding <u>reviewed</u> <u>prior to submission</u> by Faculty mentors and the Co-Directors of the Ph.D. Program.

The policies for receipt of funds varies based on a variety of factors, and students should immediately contact the GSAS Office of Financial Aid to discuss their

options and determine if they are eligible for a combined award supplement. The GSAS Office of Financial Aid will then calculate the combined award and inform the student in writing. Alternatively, a student eligible for a combined award supplement who is fully funded by an external fellowship may request to defer one year of GSAS support to a later year, with all GSAS support to be used by the end of Year 6.

For more information about combined award supplements, students should visit the GSAS website.

Yale School of Nursing PhD Award Funding Process

Step	Description	Contact(s)	For more information
Advisement	Students should work with their advisor on sources of relevant funding for their research and interests.	PhD Advisor	YSN PhD Handbook
Searching	Students review funding resources made available through YSN, GSAS, and other external sources (professional affiliations, NIH, etc)	YSN Office of Research (ysn.grants@yale.edu)	YSN PhD Handbook
Application	Students contact the YSN Office of Research as soon as they identify a potential award. The Office of Research will assist in proposal development, budget preparation, and submission. At this time students should review the details of the award should they receive it (expectations of funding allocation and allowable use)*	YSN Office of Research (ysn.grants@yale.edu)	
Award	When a student receives notice of award, they should immediately email the GSAS Financial Aid Office and cc the YSN Business Office. Students should include the award notice and budget. The GSAS Financial Aid Office will determine if the student is eligible for an stipend supplement and provide written notice.	GSAS Office of Financial Aid (gradfinaid@yale.edu) YSN Business Office/Post-Award (ysnbusinessoffice@yale.edu)	Incoming and Returning PhD Student Information Packet <u>GSAS Financial Information</u> <u>Policy regarding combined funds</u>
Award Management	Students should work with the YSN Business Office Post-Award Services for grant administration	YSN Business Office/Post-Award (ysnbusinessoffice@yale.edu)	

* Funding allocation and use will vary based on certain factors including - but not limited to - funding source, PI status, award terms, university policies, and research protocols/budget. Student are encouraged to understand the details of their proposal and budgets before submitting awards.

Examples Funding Resources and Deadlines*

Agency/Org.	Deadlines	Contact info.
NIH—NRSA (F31)	April, August, December	http://grants.nih.gov/grants/guide/pa-files/PAR- 11-117.html
Sigma Theta Tau Internationalsmall grants	December	https://www.sigmanursing.org/advance- elevate/research/research-grants/sigma-grants
Sigma Theta Tau International—other	See web page	http://www.nursingsociety.org/Research/Grants/P ages/Grantsbydate.aspx
American Nurses Foundation	May	https://www.nursingworld.org/education- events/faculty-resources/research-grants/
Oncology Nursing Society	See web page	http://www.ons.org/Awards
Rockefeller University Heilbrunn Family Center for Research Nursing	See web page	http://heilbrunnfamily.rucares.org/Nurse_Scholar _Award
American Association of Critical Care Nurses	See web page	https://www.aacn.org/education/scholarship
American Heart Association	January	https://professional.heart.org/en/research- programs
American Association of University Women	November	https://www.act.org/content/act/en/research.html
Boren awards for International Study	See web page	https://www.iie.org/programs/boren-awards-for- international-study
Fulbright	October	http://us.fulbrightonline.org/applicants
National Hartford Centers of Gerontolog Scholarship	January ical	https://www.nhcgne.org/development

(*Don't forget to factor in time (2-3 weeks) for review by your faculty mentors)

Academic Standards

The grades assigned in the Graduate School are:

- H = Honors HP = High Pass P = Pass F = Fail T = Taura consider to a second s
- TI = Temporarily Incomplete
- I = Incomplete
- NM = No Mark Submitted

The grading system includes Honors, High Pass, Pass, and Fail.

A mark of "Y" is assigned as the grade for the first term of a full-year course and will be converted to a standard grade once both terms are completed, depending on the number of credits the course fulfills.

A professor's evaluation of a student's work is final and can only be changed by the professor in cases of clerical or mathematical error. However, if it is alleged that the determination of a grade resulted from discrimination based on race, sex, color, religion, national or ethnic origin or handicap, the student may file a complaint using the Graduate School grievance procedures.

Course and Honors Requirements

The course requirements for the Ph.D. degree are set individually by each department or program. Each course offered in the Graduate School counts for a single credit. Only courses offered by the Graduate School and officially numbered on the graduate level (i.e., 500 or higher) can fulfill requirements for the Ph.D. degree, with the exception of certain language courses or where specified in advance by the department or program.

The Graduate School requires that Ph.D. students achieve the grade of Honors in at least one full-year or two full-term graduate courses, taken after matriculation in the Graduate School and during the nine-month academic year. The Honors requirement must be met in courses other than those concerned exclusively with dissertation research and preparation. A student who has not met the Honors requirement at the end of the fourth term of full-time study will not be permitted to register for the fifth term.

Students in the YSN 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 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.

A student who is not in good academic standing with regard to course work or research as defined by the minimum standards established by the Graduate School and the expectations outlined by the student's department or program (YSN) may be dismissed from the Graduate School. Such dismissal will be recorded on the student's transcript.

Admission to candidacy normally occurs no later than the end of the third year of study, A student who has not been admitted to candidacy by the expected time will not be permitted to register for the following semester, will be placed on Academic Probation, and will have to petition to complete the Qualifying Examination by the end of the 7th semester. Failure to complete the Qualifying Examination by the end of the 7th semester will result in dismissal from the program.

Once students have advanced to candidacy, they are required to submit an annual Dissertation Progress Report (DPR). Immediately upon advancing to candidacy, the online system will prompt a student to file a post-candidacy research plan for the remainder of the academic year. Subsequently, each student who has advanced to candidacy will be prompted by the system on April 1 each year to complete a report on their progress for the past academic year and a research and writing plan for the coming academic year. The following form is suggested for the student to use to summarize their dissertation progress for the adviser and committee members.

Dissertation Progress Report to Committee and Readers

STUDENT NAME, Date of reporting period Yale University School of Nursing

Dissertation Chair: Committee members: Readers:

<u>Title of the project:</u> <u>Project Summary:</u> <u>Progress to date:</u>

Goals for the [DATE] Semester: Ph.D. Coursework: Teaching Fellowship: Conference presentations: Publications: Grant applications: Workshops attended: Career development activities: A student who fails to meet the minimum requirements of the Graduate School and the department will be placed on academic hold. This means that the student will not be permitted to register in the following term.

Outside Employment

The Yale University School of Nursing Ph.D. program is an in-residence <u>full-time</u> <u>program</u>. Students are expected to devote themselves as fully as possible to their graduate studies. Outside employment is limited to <u>no more than 10 hours per</u> <u>week</u>. Students may petition for additional hours, if there is a pressing need.

Personal Conduct

Yale University is an academic community dedicated to the advancement of learning. Its members freely associate themselves with the University and in doing so affirm their commitment to a philosophy of tolerance and respect for all members of the community. They pledge to help sustain the intellectual integrity of the University and to uphold its standards of honesty, free expression, and inquiry. They are expected to abide by the regulations of the University. They are also expected to obey local, state, and federal laws, and violations of these may be cause for discipline by the Graduate School [http://catalog.yale.edu/gsas/policies-regulations/academic-regulations/#personalconduct].

The Graduate School specifically prohibits the following forms of behavior by graduate students:

- 1. Cheating on examinations, problem sets, and any other form of test; also, falsification and/or fabrication of data.
- 2. Plagiarism, that is, the failure in a dissertation, essay, or other written exercise to acknowledge ideas, research, or language taken from others.
- 3. Multiple submission of the same work without obtaining explicit written permission from both instructors before the material is submitted.
- 4. Misuse of the materials or facilities of the University library.
- 5. Unauthorized use of University services, equipment, or facilities, such as telephones, computers, labs, and photocopying equipment.
- 6. Violation of University rules for using information technology services and facilities, including computers, the University network, software systems, virtual meetings and online teaching technology, and electronic mail. (See Information Technology Appropriate Use Policy, online at https://your.yale.edu/policies-procedures/policies/1607-information-technology-appropriate-use-policy.)
- 7. Assault on, or coercion, harassment, or intimidation of, any member of the University community, including harassment on the basis of race, religion, gender, ethnicity, or sexual orientation; sexual harassment; or the use of a teaching position to harass or intimidate another student.

- 8. Engaging in a relationship with a student while serving as the student's teaching fellow or in any other direct supervisory role over the student (as outlined in the University's policy prohibiting "Teacher-Student Consensual Relationships").
- 9. Disruption of a legitimate function or activity of the University community, including disrupting classes and meetings, blocking entrances and exits to University buildings, unauthorized occupation of any space on the Yale campus, disrupting online meetings, classes, or activities with inappropriate content or activities, or preventing the free expression or dissemination of ideas. (See Freedom of Expression, below.)
- 10. Refusal to comply with the direction of a University police officer or other University official, including a member of the faculty, acting in the performance of their duties.
- 11. Misuse, alteration, or fabrication of University credentials or documents, such as an identification card or transcript, including grade lists submitted by teaching fellows.
- 12. Misrepresentation or lying during a formal inquiry by University officials.
- 13. Misrepresentation in applying for admission or financial aid.
- 14. Theft, misuse of funds, or willful damage of University property. Off-campus misconduct may result in disciplinary action if such conduct imperils the integrity and values of the University community. Off-campus violations committed in the course of a Yale-sponsored program anywhere in the world could also be subject to disciplinary charges.
- 15. Trespassing on University property to which access is prohibited.
- 16. Possession or use of explosives, incendiary devices, or weapons on or about the campus.
- 17. Interference with the proper operation of safety or security devices, including fire alarms, electronic doors or gates, fire extinguishers, and sprinkler systems.
- 18. Unlawful manufacture, possession, use, or distribution of illicit drugs or alcohol, including serving underage minors, on University property or as part of any University activity. Yale is a drug-free campus.
- 19. Use of tobacco products on any location on campus, including outdoor spaces. Yale is a tobacco-free institution.
- 20. Violation of University policies for safeguarding minor children and youth on campus whereby minors are endangered or put at risk due to action or inaction.

Violations of any of the above regulations will be referred to the Graduate School Committee on Regulations and Discipline, composed of three graduate students, three faculty members, normally one from each division, and an associate dean. Violations of regulations pertaining to sexual misconduct or the University's Consensual Relations Policy will be referred to the University-Wide Committee on Sexual Misconduct. Students found guilty of such violations will be subject to one or more of the following disciplinary penalties:

Reprimand Probation

Suspension Dismissal Fines Restitution Restriction

Penalties of suspension or dismissal will be noted on the student's transcript. Pending disciplinary charges will be noted on a student's transcript if the student withdraws from the Graduate School after being formally charged but before such charges have been resolved. A student who has petitioned for a degree will not receive the degree while charges are pending or while serving a suspension. A student who has been dismissed for a disciplinary violation may petition for a degree, to be awarded at the discretion of the Degree Committee, based on work completed before the infraction occurred. A student dismissed for academic misconduct will not receive a degree from the Graduate School regardless of requirements fulfilled before the infraction occurred. The Graduate School reserves the right to impose fines as appropriate, in addition to requiring payment for costs resulting from or associated with the offenses. In addition to imposing these penalties for offenses subject to disciplinary action, the University may refer students for prosecution, and students found guilty of unlawful possession, use, or distribution of illicit drugs or alcohol on University property or as part of any University activity may be required to complete an appropriate rehabilitation program.

Copies of the procedures of the Committee on Regulations and Discipline may be obtained from the office of each of the associate deans of the Graduate School or via the Graduate School website (http://catalog.yale.edu/gsas/policies-regulations/academic-regulations/#personalconduct). The deans may be consulted for further information and advice. A copy of the procedures is sent automatically to any student who is charged with a violation of the Graduate School's regulations.

Complaints of Sexual Harassment

All matters of Sexual Misconduct come under the University's Title IX Coordinators and the Sexual Misconduct Response and Prevention office (https://smr.yale.edu/). In addition, the SHARE center for 24/7 hotline (http://sharecenter.yale.edu/) is available for information, advocacy and support. Complaints, questions and concerns should be brought to the YSN Title IX Coordinator, Maurice Nelson, or any Title IX Coordinator in the Graduate and Professional Schools (list and contact information available at https://provost.yale.edu/title-ix/coordinators)

The Graduate School Procedure for Student Complaints

This procedure governs any case in which a student has a complaint, including but not limited to a complaint of discrimination on the basis of race, sex, color, religion, national or ethnic origin, sexual preference, or handicap, against a member of the faculty or administration of the Graduate School. Complaints that involve a misapplication of Graduate School policy are also appropriate for consideration by the Dean's Advisory Committee on Student Grievances. Complaints that require an emendation of policy will be referred to the Graduate School Executive Committee.

Complaint Resolution

If you believe that a student, faculty member, or staff member has engaged in discrimination or harassment other than gender discrimination or sexual misconduct, you may report your concerns to either:

- 1. *your Dean's Designee*, an administrator at your school who serves as a resource for students with concerns about discrimination or harassment; or
- 2. *the Office of Institutional Equity and Access*, a university-wide office which assists with dispute resolution and investigates reports of discrimination and harassment.

For additional information, please see Resources for Student to Address Discrimination and Harassment Concerns.

Residence Requirement

Students seeking the Ph.D. degree are required to be in residence in the greater New Haven area during at least three academic years. This is an academic requirement, distinct from and independent of the tuition requirement described below. The residence requirement must normally be met within the first four years of study. Any exception to the residence requirement must be approved by the department and by the appropriate Associate Dean.

Tuition Requirement and the Continuous Registration Fee

All Ph.D. candidates are charged four years (eight terms) of full tuition, or proportionately less if all degree requirements, including submission of the dissertation, are completed in less than four continuous years of full-time study from the date of matriculation in the Ph.D. program. Once the full-tuition obligation has been completed, registered students are charged the Continuous Registration Fee (CRF).

Ph.D. students at YSN receive 4 years of tuition support, stipends, and health insurance coverage. YSN does not cover additional health insurance for spouse and/or family, however students who wish to request that additional coverage must do so with the Graduate school and it is subject to approval from YSN. For information about fees following the 4th year, students should consult the DGS.

Transfer Credit and Advanced Standing

The Graduate School does not award transfer credit for graduate work completed before matriculation at Yale. A department may, with the approval of the Graduate School, waive a portion of the Ph.D. course requirement (normally a maximum of three courses) in recognition of previous graduate-level work done at Yale or elsewhere. Such a waiver does not affect the full-tuition requirement. Courses taken previous to matriculation at Yale will not appear in the student's Graduate School transcript.

Registration

Ph.D. students register for Graduate School courses by submitting course selections through the Universities Online Course Selection (OCS) web application via http://www.yale.edu/sis. Students need their NetID and password to access OCS. When students log in to the SIS site, they will be asked to update and certify the accuracy of their student data. Once this is done, students can access OCS.

For detailed instructions on how to register and select courses, see "Instructions for Graduate School Online Course Information and Selection" at: http://www.yale.edu/sfas/registrar/GSOCS_Instructions.pdf.

When registering for courses on OCS, students will need to select a "Grade Mode." Use the drop-down box to indicate whether the course will be taken for credit (marked "H/HP/P/F") or audit (marked "Audit"). See 2.b. Auditing for more information.

No student may attend any class unless officially registered in the course. No credit will be given for work done in any course for which a student is not officially registered, even if the student entered the course with the approval of the instructor and the Co-Directors of the Ph.D. Program. Graduate students who wish to register for courses that are offered on both the graduate and undergraduate levels must register with the graduate-level course number (i.e., 500 or higher) in order to receive credit toward their degrees.

Students must register for QUAL999 in the semester in which they are preparing to take their qualifying examination. Once students have been admitted to candidacy and are doing a majority of the dissertation research, they need to register for DISR 999. If they are doing the research away from Yale, they need to register for DISA 999 (absentia) instead.

The OCS process is tied to the Graduate School's Faculty Student Advising (FSA) system and allows faculty advisers and the Co- Directors of the Ph.D. Program to review and approve course selections online, or request revisions if necessary.

All students are required to set up an appointment and meet with their adviser during the registration period.

All students must register officially for all courses. Credit will not be given for work done in any course for which a student is not officially registered, even if he or she may have the approval of the instructor and the DGS.

Registering for Courses Outside of the Graduate School

If students wish to register for courses outside of the Graduate School, they must first check with the registrar of that professional school about its course enrollment and grading policies, as well as its academic calendar (students must observe BOTH graduate School and professional school policies and deadlines). There may be special paperwork that needs to be completed at some professional schools. If you are taking courses at schools outside the Graduate School, you must report any changes in enrollment to both the Graduate School and that professional school.

If students wish to register for Yale College Courses, they must complete a Graduate Credit Request Form

(https://registrar.yale.edu/sites/default/files/graduate_credit_request_form_0.pdf) with two working days following the conclusion of registration for the term in which the request is made.

Auditing

Auditors must attend at least 2/3 of all class meetings. Individual instructors may not allow auditors in their classes or may set additional requirements for auditing. BEFORE completing course enrollment as an auditor, students must check with the instructor about his or her requirements for auditing and to receive permission to audit. If an audited course is completed successfully, the instructor will record a grade of "AUD", which will appear on the transcript. A grade of "NA" (Audit not fulfilled), will NOT appear on the transcript.

Changes to Course Registration

Once students have finalized their schedule in OCS and received adviser and DGS approval, they CANNOT make changes to their schedule online. All course enrollment changes (at any point throughout the semester) must be reported to the Graduate school registrar on a Course Schedule Change Notification Form at: https://registrar.yale.edu/forms-petitions. Complete this form to add or drop a course after registering on OCS.

There are different deadlines for adding and dropping courses. Those dates are listed on the Graduate School's Academic Calendar (https://gsas.yale.edu/academic-requirements/academic-calendar)

Any changes requested after those deadline dates will go directly to the Graduate School's Associate Dean for approval.

If changes to course schedule are made after the registration deadline, students are assessed a late registration fee.

Summer Registration

The Graduate School does not offer summer courses as Spring Semester extends until the first day of Fall Semester courses. They have no formal summer term and there is no separate summer registration. Please contact the DSG if you have questions regarding summer work.

Individual Study (Independent Study)

The Graduate School allows students to take Individual Study courses. Students can register for these online through OCS by using the course number NURS 920 (fall) and NURS 921 (spring). Students will then be prompted by a drop-down box to enter in the title and the instructor.

A syllabus for the independent study is required. The syllabus must be approved by the faculty of the course and the Co-Directors of the Ph.D. Program no later than 2 weeks after the beginning of classes.

• The syllabus must include the following: Course Description, Course Objectives, Teaching Methods, Faculty, Course Time, Course Requirements, Evaluation of Student/Faculty, Required Texts and Documents, Course Schedule and Suggested Readings

The Faculty Adviser and Co-Directors of the Ph.D. Program will also approve the independent course online when approving the student's course schedule each semester.

Student will need to complete and submit paper forms to the Graduate School if:

- They wish to add an Individual Study afterward they have already submitted their schedule online and it has been approved by the adviser and DGS.
- They wish to sign up for more than one Individual Study in the same semester. (The online system will not let them register for what it thinks is the same course).
- They wish to change title or instructor. They will have to drop out of the original "course" and add the new one.
- Their first attempt to register for the semester is after OCS closes.

In this case, students must complete BOTH an Individual Study Course Information Form:

(https://registrar.yale.edu/sites/default/files/individual_study_course_information_0.pdf)

and a Course Schedule Change Notification Form found here: (https://registrar.yale.edu/forms-petitions)

On the Individual Study form, please be sure to list "NURS 920/921" as the "Dept. #". Leave the "CRN" blank. The Graduate School registrar will complete that.

Registration in Absentia

Students are normally expected to register in residence; registration in absentia may be permitted for students who are current with all Graduate School and departmental requirements and have compelling academic reasons to study off campus for a term or a year. Permission to register in absentia does not exempt the student from the three-year minimum residence requirement for the Ph.D. Registration in Absentia Request Forms can be found at: https://registrar.yale.edu/forms-petitions

English Proficiency

Applicants whose native language is not English must present evidence of proficiency in English by satisfactorily completing the Test of English as a Foreign Language (TOEFL), which is administered by ETS, or the International English Language Testing System (IELTS). Applicants who have received or will receive an undergraduate degree from a college or university where English is the primary language of instruction are exempt from the English Language Test requirement and are not required to submit the TOEFL or IELTS. Applicants must have studied in residence at the undergraduate institution for at least three years to qualify.

Ph.D. students whose native language is not English, and who did not meet the oral English proficiency standard at the time of matriculation, must enroll in a English Language Program course each term until they pass Yale's Oral Performance Assessment (OPA2). More information on can be found on the Center for Language Study's English Language Program website.

Leave of Absences and Withdrawals

Students who wish or need to interrupt their study temporarily may request a leave of absence. There are three types of leave, personal, medical, and parental, all of which are described below. The general policies that apply to all types of leave are:

- 1. All leaves of absence must be approved by the Graduate School's Associate Dean on the recommendation of the School of Nursing. Medical leaves also require the recommendation of a Yale Health Plan (YHP) physician, as described below; see Medical Leave of Absence.
- 2. Students may be granted a leave for one term or one academic year. A leave extends the eligibility for fellowship aid by a time equal to the duration of the leave, but not for partial terms. The expected last date of registration will be adjusted by one term for each term of the leave. In exceptional circumstances renewal of one term or one year, to a maximum total of two years of leave, may be granted. Students who fail to register for the term

following the end of the approved leave will be considered to have withdrawn from the Graduate School.

- 3. Students on leave may complete, by the appropriate deadline for the term in which the course was taken, outstanding work in courses for which they have been granted approved incompletes. They may not, however, fulfill any other degree requirements during the time on leave. (Students who intend to work toward the degree while away from the University must request registration in absentia). Students who in fact make progress toward the degree while on leave will have their registration changed retroactively to in absentia for the period of the leave.
- 4. A leave of absence does not exempt the student from meeting the tuition requirement (payment of eight terms of full tuition in Ph.D. programs) or from paying the Continuous Registration Fee (if appropriate), but merely postpones the required charges.
- 5. Students on leave of absence do not have to file a formal application for readmission. However, they must notify the registrar in writing of their intention to return. Such notification should be given at least six weeks prior to the end of the approved leave.

Personal Leave of Absence

A student who is current with his or her degree requirements and who wishes to interrupt study temporarily because of personal exigencies may request a personal leave of absence. The general policies governing leaves of absence are described above. Students are eligible for personal leaves after satisfactory completion of at least one term of study. Normally, students in Ph.D. programs are not eligible for personal leaves after the fourth year of study. In certain exceptional cases, however, personal leaves may be granted to students beyond the fourth year of study. Personal leaves cannot be granted retroactively and normally will not be approved after the tenth day of a term.

To request a personal leave of absence, the student must complete the Personal Leave of Absence Request Form

(http://www.yale.edu/graduateschool/academics/forms/leave.pdf) before the beginning of the term for which the leave is requested, explaining the reasons for the proposed leave and stating both the proposed start and end dates of the leave and the address at which the student can be reached during the period of the leave. If the Graduate School's Associate Dean finds the student to be eligible and the School of Nursing approves, the leave will be granted. In any case the student will be informed in writing of the action taken. Students who do not apply for a leave of absence, or who apply for a leave but are not granted one, and who do not register for any term, will be considered to have withdrawn from the Graduate School. Students on a personal leave of absence are not eligible for financial aid, including loans, or for the use of University facilities normally available to registered students. Students granted a personal leave may continue to be enrolled in the Yale Health Plan (YHP) by purchasing coverage through the Student Affiliate Coverage plan. In order to secure continuous YHP coverage, enrollment in this plan must be requested prior to the beginning of the term in which the student will be on leave or, if the leave commences during the term, within thirty days of the date when the leave is granted. Coverage is not automatic; enrollment forms are available from the Member Services department of the Yale Health Service, 55 Lock Street, 203-432-0246.

Medical Leave of Absence

A student who must interrupt study temporarily because of illness or injury may be granted a medical leave of absence with the approval of the Graduate School's Associate Dean, on the written recommendation of a physician on the staff of Yale Health and of the School of Nursing. Final decisions concerning requests for medical leaves will be communicated to students from the Associate Dean in writing.

The Graduate School reserves the right to place a student on a medical leave of absence when, on the recommendation of the director of Yale Health or the chief of the Division of Mental Hygiene, the Dean of the Graduate School determines that the student is a danger to self or others because of a serious medical problem.

The general policies governing all leaves of absence are described above. A student who is making satisfactory progress toward his or her degree requirements is eligible for a medical leave any time after matriculation. Students who are placed on a medical leave during any term will have their tuition adjusted according to the same schedule used for withdrawals (please see Schedule of Academic Dates and Deadlines at http://www.yale.edu/graduateschool/academics/forms/leave.pdf). Before re-registering, a student on medical leave must secure written permission to return from a physician at Yale Health. Advanced Ph.D. students may return at any time, with the permission of Yale Health. Forms for requesting a medical leave of absence are available at the Graduate School Student Information Office and online at https://registrar.yale.edu/sites/default/files/change_of_status_form_master_0.pdf.

Students on medical leave of absence are not eligible for financial aid, including loans, or for the use of University facilities normally available to registered students. Health coverage options during a leave of absence are described in the Graduate School of Arts and Sciences Programs and Policies (2020-21). Eligible Ph.D. students will receive a Health Award from the Graduate School to cover the cost of the Student Affiliate Coverage Plan for the remainder of the term in which the leave is started, if they apply for this coverage through the Yale Health Plan within thirty days of the start of their leave. Coverage is not automatic; enrollment forms are available from the Member Services Department of Yale Health, 55 Lock Street, 203.432.0246.

Leave of Absence for Parental Responsibilities

A student who is making satisfactory progress toward his or her degree requirements and wishes to, or must, interrupt study temporarily for reasons of pregnancy, maternity or paternity care, may be granted a leave of absence for parental responsibilities. Any student planning to have or care for a child is encouraged to meet with his or her DGS and the Graduate School's Associate Dean to discuss leaves and other short-term arrangements. For many students, short-term arrangements, rather than a leave of absence, are possible. The general policies governing all leaves of absence are described above, including information about health coverage. A student who is making satisfactory progress toward his or her degree requirements is eligible for a leave of absence for parental responsibilities any time after matriculation.

Students on leave of absence for parental responsibilities are not eligible for financial aid, including loans, or for the use of University facilities normally available to registered students. Health coverage options during a leave of absence are described on page 502 of GSAS handbook. Eligible Ph.D. students will receive a Health Award from the Graduate School to cover the cost of the Student Affiliate Coverage Plan for the remainder of the term in which the leave is started, if they apply for this coverage through the Yale Health Plan within thirty days of the start of their leave. Coverage is not automatic; enrollment forms are available from the Member Services Department of Yale Health, 55 Lock Street, 203.432.0246.

Students living in University housing units are encouraged to review their housing contract and the related policies of the Graduate Housing Office before applying to the Graduate School for a leave of absence. Students granted Parental Leave may continue to reside in University Housing to the end of the academic term for which the leave was first granted, but no longer.

Withdrawal and Readmission

A student who wishes to terminate his or her program of study should confer with the DGS and the Graduate School's Associate Dean regarding withdrawal; their signatures on an official withdrawal form are required for withdrawal in good standing. The Associate Dean will determine the effective date of the withdrawal, upon consultation with the department. The University identification card must be submitted with the approved withdrawal form in order for withdrawal in good standing to be recorded. Withdrawal forms can be found online at: https://registrar.yale.edu/sites/default/files/change_of_status_form_master_0.pdf.

Students who fail to meet departmental or Graduate School requirements by the designated deadlines will be administratively withdrawn, unless an extension or exception has been granted by the appropriate dean or degree committee. Students

who do not register for any fall or spring term, and for whom a leave of absence has not been approved by the appropriate Associate Dean, are considered to have withdrawn from the Graduate School.

A student who discontinues his or her program of study during the academic year without submitting an approved withdrawal form and the University identification card will be liable for the tuition charge (or Continuous Registration Fee) for the term in which the withdrawal occurs. Tuition charges for students who withdraw in good standing will be adjusted as described in the Schedule of Academic Dates and Deadlines. The Continuous Registration Fee for the term is not canceled if a student withdraws after the fourteenth day of the term. Health service policies related to withdrawal and readmission are described online at:

https://registrar.yale.edu/sites/default/files/change_of_status_form_master_0.pdf.

A student who has withdrawn from the Graduate School in good standing and who wishes to resume study at a later date must apply for readmission. Neither readmission nor financial aid is guaranteed to students who withdraw. The deadline for making application for readmission is January 2 of the year in which the student wishes to return to the Graduate School. The student's application will be considered by the department, which will make a recommendation for review by the appropriate Associate Dean. The student's remaining tuition obligation will be determined at the time of readmission.

Parental Support and Relief

Registered Ph.D. students who wish to modify their academic responsibilities because of the birth or adoption of a child may request parental support and relief during or following the term in which the birth or adoption occurs. For the whole of the term in which the support and relief are granted, the student's academic clock stops, effectively adding an additional term to the total time to degree. During this period, students remain registered full-time, receive a standard financial aid stipend and Health Award, and receive modified departmental academic expectations that best suit the specific situation. The precise nature of the academic responsibilities undertaken or suspended during this period should be a matter of consultation between the adviser and the student, with the understanding that students are entitled to full relief from responsibilities for at least an eight-week period. Most students take an entire term of parental relief, but the relief may be split in two, with a student taking only eight weeks of relief during the term in which, or just after, a birth or adoption occurs and then receiving an additional eight weeks of stipend funded by the Graduate School postponed to a later term. Parental relief may not be combined with other funding. To arrange for parental relief, a student should contact the associate dean for graduate student advising and academic support prior to the term of the birth or adoption. This benefit is limited to two birth or adoption events. If both parents are Ph.D. students at Yale, both may receive this benefit per birth or adoption event. Graduate students in terminal M.A.S./M.A./M.S. programs may modify their academic responsibilities because of

the birth or adoption of a child. They should contact the associate dean the term before the planned modifications would occur.

Transcripts

Transcripts are requested online through the University's SIS system or by mail through the University Registrar's Office. The School of Nursing cannot issue transcripts for Ph.D. students or alumni. The request form and information about transcripts can be found at: http://registrar.yale.edu/students/transcript-requests

Enrollment Verifications, Degree Verifications, and Dossier Requests

In order to request an enrollment or degree verification, students must call or write to the University Registrar's Office at least five business days before you need the verification sent. Yale considers the contents of enrollment and degree verifications to be items of directory information, which can therefore be produced without the student's written authorization. Students on non-disclosure must submit a signed request. The request form can be found at:

http://www.yale.edu/sfas/registrar/enrollment_verification_request

The Graduate School Office of Career Services (203-432-8850) is responsible for the dossier. You can request dossier service at:

http://registrar.yale.edu/students/graduate-students/dossier-requests The Registrar's Office provides Career Services with an official dossier transcript. Each dossier is \$5.00 for regular service and \$15.00 for express 24-hour service. Payment is made directly to the Graduate School Office of Career Services. There is no separate charge for the dossier transcript.

Contact Information Position/Name	Phone /e-mail	Room # West Campus
Graduate School Office of the	203-432-2743	n/a
Registrar	(fax) 203-432-8644	
Main Campus, New Haven		
Dean,	203-735-2393	31605
Ann Kurth	ann.kurth@yale.edu	
Executive Deputy Dean,	203-785-5475	31407
Carmen Portillo	carmen.portillo@yale.edu	
Director, Research,	203-737-2371	
Jenna DesJardins	jenna.desjardins@yale.edu	
Co-Chairs Ph.D. Program		
M. Tish Knobf	203-737-2357	20006
	tish.knobf@yale.edu	
Lois S. Sadler	203-737-2561	22009
	lois.sadler@yale.edu	
Ph.D. Program Registrar	203-737-2420	32107
Lorena Fonte	lorena.fonte@yale.edu	
Ph.D. Committee Faculty		
Samantha Conley	203-737-1754	20510
	samantha.conley@yale.edu	
Shelli Feder	203-737-3822	21401
	shelli.feder@yale.edu	
Margaret Grey	203-737-1792	21405
	margaret.grey@yale.edu	
Holly Powell Kennedy	203-737-1302	22302
·	holly.kennedy@yale.edu	
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GRADUATE SCHOOL CONTACT INFORMATION

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Dean	208	2-2733
Academic Deans	XX7 XX	2 0000
Pamela Schirmeister, Deputy Dean, Sr. Associate	Warner House	2-9098
Dean of Strategic Initiatives	201	
Allegra di Bonaventura,	Warner House	6-2628
Associate Dean of Graduate Student Academic	312	0 2020
Support		
Ann Gaylin, Associate Dean for Graduate	Warner House	6-2628
Education	205	
	XX7 II	0 1004
Robert Harper-Mangels, Assistant Dean	Warner House 311	2-1884
Jasmina Besirevic Regan, Associate Dean for	Warner House	2-5127
Partnerships and Special Projects	301	2-3127
	501	
Diversity and Equal Opportunity		
Michelle Nearon, Senior Associate Dean for	Warner House	6-1301
Graduate Student Development and Diversity,	206	
Director OGSDD		
Danica Tisdale Fisher, Assistant Dean of	406 Dow Hall	6-4171
Diversity	400 DOW Hall	0-41/1
Diversity		
Nicole Wade, Sr Administrative Assistant	Warner House	2-4440
	101	
Student Services & Reception		
Darbara Withingon Sr Administrative Assistant	Warner House	2 0461
Barbara Withingon, Sr Administrative Assistant	warner House	2-0461
Financial Aid		
Sara Estrom, Director	Warner House	2-7980
	106	

Kelly Webb, Assistant Director	Warner House 108	2-2899
Dawn Galbicsek, Financial Aid Assistant	Warner House 108	2-7423
Teaching Fellow Program		
Howard El-Yasin, Assistant Director	Warner House 108	2-2757
Graduate Admissions		
Leah Phinney, Director	Warner House 307	2-2749
Lisa Furino, Assistant Director	Warner House 302	2-7017
Jaime Dietz, Admissions Associate	Warner House	2-2773
Registrar Claudia Schiavone, Assistant University Registrar	246 Church St	6-1579
Roxanne Niblack, Sr Administrative Assistant	246 Church St	2-2743
Graduate Student Life, McDougal Center		
Lisa Brandes, Assistant Dean for Student Affairs	HGS 126	2-8895
Jennifer Mendelsohn, Associate Director	HGS 125	2-2008
Graduate Writing Center Director TBD		2-7725

YALE GRADUATE SCHOOL RESOURCES

Warner House, 1 Hillhouse Ave contains the offices of the Graduate School administration.

McDougal Graduate Student Center. The McDougal Center has services and facilities designed specifically for graduate students and postdocs including:

- **Graduate Career Services (GCS):** Career and job service advice, resume/dossier development, women's mentoring, career books (http://gsas.yale.edu/academic-professional-development/office-career-strategy)
- **Graduate Student Life (GSL):** University services (housing, health, parking, travel, etc.), Writing workshops and tutoring, personal counseling

and advocacy, student government, student organizations and social events (https://gsas.yale.edu/resources-students/student-life-community)

- **Poorvu Center for Teaching and Learning:** Programs, individual consulting, teaching resources (https://poorvucenter.yale.edu/GraduateStudents)
- Office for Diversity and Equal Opportunity. The Office provides support at many levels to students of color and women as they prepare for, begin and complete the graduate education process at Yale. The Office for Diversity and Equal Opportunity's mission is to expand the diversity of the student body and to enhance the intellectual experience of the entire scholarly community. http://ctl.yale.edu/teaching/ideas-teaching/diversity-classroom

Student Gateway. Webpage with links to University resources (e.g., information about Health plan, ID, Parking), Academic resources (e.g., course information), News and events (e.g., cultural events), Living in New Haven, etc. (http://studentlife.yale.edu/0)

Yale Health http://yalehealth.yale.edu/

Resources for Research and Study. Yale's outstanding facilities for research and study include a university library system of more than twelve million volumes, the Beinecke Rare Book and Manuscript Library, the Yale University Art Gallery, the Yale Center for British Art, the Office of Information Technology Services, departmental libraries and collections, and the extensive resources of the professional schools. The collections and services of the Research Libraries Group, which consists of Columbia, Harvard, and Yale universities and the New York Public Library, are also available to students.

Special research facilities for the sciences include the Bass Center for Molecular and Structural Biology, Josiah Willard Gibbs Research Laboratories, Kline Geology Laboratory, Sterling Chemistry Laboratory, Kline Biology Tower, Becton Engineering and Applied Science Center, the Class of 1954 Environmental Science Center, the Peabody Museum of Natural History, the Arthur W. Wright Nuclear Structure Laboratory, Arthur K. Watson Hall for computer science, the Boyer Center for Molecular Medicine, the MacMillan Center, and the many other science laboratories throughout the campus.

Yale University Library. The Libraries and Collections section of the Yale University Library Web site links to the 22 libraries that comprise the Yale University Library system, plus the many special collections housed within the various libraries. From Libraries and Collections, you can find not only Yale's virtual libraries and collections, but information about our physical locations and how to reach them. http://www.library.yale.edu/libraries/

Nursing Library and Information Resources. Janene Batten, the YSN librarian, is very helpful (203.737.2964) (http://nursing.medicine.yale.edu/)

IT Resources. http://nursing.yale.edu/technology-resources

Yale School of Nursing Center for Biobehavioral Health Research

https://nursing.yale.edu/research/center-biobehavioral-health-research

The YSN Center for Biobehavioral Health Research is a 2,800-square foot facility located in the School of Nursing building. The laboratory includes a reception area; an examining/interview room for intake of participants into study protocols; a space, including equipment (freezer, refrigerator, centrifuge) and supplies, for obtaining and storing biomarker data; a behavioral observation room with one-way mirror; video-recording and data storage capability; a state-of-the art 12 seat focus group room with video-recording and video-conferencing capabilities; a three-bed sleep laboratory with CompumedicsTM data recording, storage, and video capability, a kitchen and sitting area; and an exercise room for exercise studies.

The mission of the Center is to support the conduct of cutting-edge clinical research focused on improving understanding of the interactions of biological and behavioral phenomena in relation to health. The Center supports the use of qualitative, quantitative, and mixed-methods approaches to measurement and analysis.

The Center is supported by the Yale School of Nursing. Core faculty are drawn from Yale Schools of Nursing, Medicine, and Public Health. The intent of the Center and its core faculty is to address significant health problems through the provision of facilities, infrastructure support, consultation, and education. The Center is available to Yale faculty, trainees, and students, and the broader research community.

Work Space. Each Ph.D. student is assigned cubicle space on an annual basis. This space includes a desk, phone, and locked file cabinet.

Escort Service. Escorts 203-432-9255 or 2-WALK (2-9255): University Security operates a security escort service on campus for any member of the University community who requires an escort. The escort service will provide you with a walking escort to or from any location within a reasonable walking distance on the campus, 24 hours a day, 7 days a week. A Uniformed Yale Security Officer will be dispatched to your location and escort you to your final on-campus destination. It is advisable to request the escort approximately 15 minutes prior to the intended departure time.

Emergency. On or Off Campus—911

Format for the Traditional Option for Dissertation

A dissertation may logically be divided into as few as four chapters (e.g., Background, Methods, Results, Discussion) or as many as seven (e.g., Clinical Problem, Review of Literature, Conceptual Framework, Method, Results, Discussion, Conclusions). The choice of organization depends on a number of factors including student preference and writing style, adviser preference, and the topic. Often the organizational pattern seems to fall naturally from qualities of the study. The student should be sure to discuss organizational issues with the dissertation committee before proceeding with the writing. A review of past dissertations on similar topics may also be helpful and can be accessed with the assistance of the YSN Librarian.

A well-done dissertation proposal provides the basis for the beginning chapters of the dissertation. Typically, the section of the dissertation proposal addressing the clinical problem, background literature, and conceptual framework can be updated and used in the dissertation. In the Proposal, the methods are described in the <u>future</u> tense. This must be changed to the <u>past</u> tense in the Dissertation. A description of the components of a typical dissertation is outlined below.

Chapter 1: Clinical Problem

This chapter may include the description of the problem, review of the literature, research questions and/or hypotheses, and operational definitions, or as mentioned earlier, may be broken down into more than one chapter.

<u>Description of the Problem</u>. This section is used to justify the study. It should include a description of the problem to be addressed in the study, including who is affected by the problem and how widespread it is. A brief discussion about what is currently known about the problem is included, as well as what still needs to be studied. It is important to include why it is important to nursing that this problem be addressed. This section should be succinct and end with a clear statement of the problem to be studied. This is usually written as a question or stated as the purpose of the study. Following the National Institutes of Health format, this is the specific aims section of the proposal.

<u>Chapter 2: Conceptual/Theoretical Underpinnings and Review of the</u> <u>Literature</u>

The conceptual or theoretical framework used to guide the study often is presented at the beginning of the review of literature and used as an organizing structure for the review. This section of the proposal may describe a specific theory (e.g., Uncertainty is Illness Theory), a framework generated from evidence in the literature or one or more concepts that inform the student's understanding of the subject matter. The literature review should start with an introduction that orients the reader to how the section is organized and what the writer intends to accomplish. It should include a discussion of all the variables under study and present a <u>critical</u> summary of relevant literature. Studies should be compared and contrasted, rather than presented one by one and the student needs to demonstrate synthesis of the findings. The amount of detail given about any particular study is dependent upon its importance to the dissertation undertaken. The review should end with a summary that outlines the concluding major points. The Specific Aims and/or hypotheses should follow logically from the literature review.

Chapter 3: Research Methods

Methods for the study include the study design, selection of sample and setting, measures/instruments, and data collection and procedures, and data management and analysis plans.

<u>Research Design</u>. The study design is the overall approach to answering the research questions that have been posed. It identifies the study as using a specific type of design (e.g. survey, experimental, qualitative) and sets the stage for the readers' expectations regarding other aspects of the research methods.

Sample and Setting. The study population and the method for sampling the population must be specified in such a way that it is clear that the population and sample are appropriate for the problem under investigation. No magical number constitutes an adequate sample size, which depends on the nature of the problem, type of inquiry, and level of measurement. For a quantitative study, a power analyses must be done to determine how many subjects are needed to demonstrate an effect. For a qualitative study, the approach to purposive or theoretical sampling is described and justified as is the target sample size. It is extremely important to determine in advance by checking records and talking to informed staff how many people one can reasonably expect to obtain in a given period of time. It is the investigator's responsibility to determine that the estimate is as accurate as possible. The research setting is also described. The appropriateness of a research setting is judged by its adequacy for gathering data pertinent to the question guiding the study and the challenges associated with the setting in terms of access to patients, expectations, distance, etc. Health services research/health policy research may be conducted in government or other policy-related settings.

<u>Data Collection Instruments</u>. The instruments selected for the study reflect the student's operationalization of the concepts of interest. The primary criterion in the selection of measurements/instruments is whether they accurately and consistently

measure the phenomenon of interest in the population of interest. Care must be taken to assure that the conceptual framework and operational definitions of the phenomena of interest for the measurement instruments are the same as those for the dissertation. If one is studying the concept "hope," there are many ways to define hope and then to measure it. An instrument is not valid if the conceptualization and definition of terms used to develop the instrument do not match with subsequent researchers' intentions.

Measures should be reliable, valid, sensitive, precise, and they should be examined carefully in relation to these criteria. Such evaluation may be the main focus of measurement studies. In other studies, some evidence should be presented to evaluate the usefulness of any measurement procedures. If an instrument is commonly used, evidence of reliability and validity as described by other authors should be reported. If it has been used even once before, that use provides some material for reliability and validity reporting. (If results were as expected, that hints that the instrument measured what it was designed to measure). If you develop your own research instrument, a description of the development process should be provided, and you must look at reliability and validity both before use and after you obtain your data. Each instrument should be described <u>separately</u>, <u>specifically</u>, <u>and in full detail</u>. Reliability and validity issues <u>must</u> be addressed.

If you use someone else's instrument, you must give credit to the original author and indicate whether you used the tool as originally constructed or modified it. If instruments are copyrighted, you must obtain permission to use them. If there is a great deal of information available on your instruments, you may want to put some of the details in an appendix of your final report. Consult with your adviser about the appropriate use of appendices.

In a qualitative study that does not use a standardized or structured measure, strategies for data collection are described. If interview guides are being used, they need to be fully described as to the source of questions and probes and their use with study participants. If participant observation is being used to collect data, the role of the researcher needs to be addressed. The description of data collection techniques needs to address the adequacy of the data for addressing the study question(s) and checks on the data to assure quality. The student is expected to draw on appropriate literature on qualitative data collection in describing and justifying strategies and decisions related to data collection.

<u>Data Collection Procedures</u>. The exact method for collecting, recording and processing data of any kind--e.g., observations, rankings, categories, descriptors, etc., must be described in detail. The researcher seeks objectivity in collecting data for any study, as in preventing bias and providing comparable data for the various subjects in the sample. Precise categories for description and valid or established measures are tools for preventing bias and providing comparability. In a qualitative

study, where the design often is less precise and more emergent, it is especially important to maintain an audit trail of ongoing methodological decisions, so that the process of data collection can be evaluated and conveyed to others. In this section the exact manner in which subjects are approached is also described. A separate section on protecting human subjects may be used to describe the consent procedure, or that material may be integrated into this section.

<u>Data Analysis</u>. In the dissertation proposal, the methods chapter concludes with a section introducing and summarizing the plans for data management and data analysis method. It is usually one or two paragraphs in length organized according to aim or research question. Much of the material used in the methods chapter was originally prepared for the Proposal, so careful revision and updating is always necessary. Do not expect committee members to read this in the future tense after the work has been completed. Make changes necessary to indicate how the analyses actually were carried out rather than what was planned.

Chapter 4: Results

Data analysis consists of reducing and summarizing the data, as well as using tests of statistical significance if such tests are appropriate for the data. The specific analytical techniques vary with the type of study and kind of data. When in doubt, investigators should check with their Dissertation Committee and seek further consultation on statistical or qualitative analytic techniques as needed.

The results chapter begins with a description of the sample (demographic characteristics; health and/or illness characteristics). This is followed by results relevant to each research question or hypothesis in the order in which they are listed in Chapter I. Some people include an "other findings" section in order to report other interesting data. For quantitative studies, reports of results may include such non-statistical material as oral or written comments by subjects, description of observed behavior, etc. For qualitative studies, results typically are presented in terms of overarching themes or conceptualizations based on the narrative data. Tables should be used to present data in an orderly fashion but should not be overused. If the information can easily be given in the narrative, a table is not necessary. For example, one might say that 30 of the subjects were male (43%) and 40 were female (57%). It would then be unnecessary to construct a table with exactly the same information. In the narrative, a table should be described and the important details highlighted, but all the information from the table should not be reported in the text. The narrative and tables complement each other; they should not duplicate each other.

Chapter 5: Discussion

Although it seems redundant, this chapter starts with a brief description of the purpose of the study and the subjects included. The key results (as presented in the previous chapter) are explained and interpreted. The findings of the study should be related carefully to the original problem, to nursing, and to past and future research. This discussion should include consideration of the scope, value, and dependability of the findings. A reevaluation and perhaps redefinition of the problem may well be an important contribution. Creative speculation should go beyond the mere reporting of the data to full exploration of new insights into the problem and specific recommendations for further research. This is the place for speculative, creative and interpretational analyses. Such interpretation can provide new conceptualization of the phenomenon under study and can suggest or prepare for more definitive studies.

Results are highlighted in the main section of the discussion. This is usually followed by other sections: Limitations of the Study, Conclusions, Implications for Research, Implications for Practice, and Implications for Policy. If interpretations are unusually extensive or broad, combining material into a single last chapter may be unwieldy. A separate chapter, Conclusions and Implications, distinct from the Discussion chapter may be created in such cases. In this chapter the study's conclusions are summarized.

Format for Publication Option for Dissertation

Single Research Study. As is the case with the traditional dissertation, the publication option for the dissertation will represent a single research study, not three unrelated or loosely related papers. The student is expected to make an original contribution to the science of nursing.

Nature of Manuscripts, Phase in Publication Process, and Authorship. Three manuscripts directly related to the research study are required. At least one will be data-based, i.e., reporting the results of the student's study. Others might be manuscripts addressing the state of the science (literature review), conceptual underpinnings, methods, measurement, instrument development, pilot study results, or policy analysis. Another data-based manuscript would also be acceptable. The expectation is for all three manuscripts to eventually be published in peer-reviewed journals approved by the student's Dissertation Chair. For the final dissertation to be accepted and submitted to the Graduate School, all three manuscripts must be submitted for publication in peer-reviewed journals. Faculty can be co-authors, but the student must be the first author on all three manuscripts. The student and Dissertation Committee will agree on authorship of the manuscripts, including who will serve as co-authors and in what order they will be listed.

Dissertation Proposal. The dissertation proposal should include a statement of the problem, conceptual underpinnings, review and synthesis of relevant literature, proposed methods for the dissertation study, and plans for the focus and scope of each manuscript. It should not exceed 50 pages double spaced. During the proposal development phase, the student will meet with the Dissertation Committee to discuss the nature and content of the dissertation study and manuscripts. The oral defense of the proposal will be similar to what is done for the traditional dissertation but may also include questions about plans for publication.

Final Dissertation. The final dissertation will include the proposal, the three manuscripts/publications, and conclusions, which includes an explication of how the manuscripts fit together. If a manuscript has already been published, the student must obtain permission from the journal editor to include it in the bound dissertation. The oral defense of the final dissertation will be similar to what is done for the traditional dissertation. The final dissertation will be formatted as five chapters.

Chapter 1: Clinical Problem

This chapter includes a broad overview of the clinical problem that informed the three manuscripts and a brief description of the three manuscripts. This should not be an extensive review of the literature; nor does it need to be lengthy. Each manuscript will include the appropriate review of the literature relevant to that manuscript. This chapter should be approximately 5 pages double-spaced.

Chapter 2: Manuscript #1.

This chapter includes manuscript #1. The title page should include all authors and where the manuscript has been submitted for publication or published. If the manuscript has been published, copyright permission from the journal must be obtained unless a copyright release was obtained at the time of publication for this manuscript to be published as a dissertation.

Chapter 3: Manuscript #2.

This chapter includes manuscript #2. The title page should include all authors and where the manuscript has been submitted for publication or published. If the manuscript has been published, copyright permission from the journal must be obtained unless a copyright release was obtained at the time of publication for this manuscript to be published as a dissertation.

Chapter 4: Manuscript #3.

This chapter includes manuscript #3, which is typically the findings of the dissertation study. The title page should include all authors and where the manuscript has been submitted for publication or published. If the manuscript has been published, copyright permission from the journal must be obtained unless a copyright release was obtained at the time of publication for this manuscript to be published as a dissertation.

Chapter 5: Discussion

This chapter includes a brief summary of the clinical, research, and policy implications of the three manuscripts. This should be a broad overview of the three manuscripts, not the implications for each manuscript separately. This chapter should also be concise, 5-10 pages, maximum.

Dates and Deadlines Fall 2021 to Spring 2022

Please refer to the following links to Academic Calendars:

Yale School of Nursing 2021-2022

https://nursing.yale.edu/academics/academic-calendar

Graduate School Calendar 2021-2022

http://gsas.yale.edu/admissions/dates-deadlines

APPENDIX D

Special Registration

Special Students

Students in the Division of Special Registration engaged solely in coursework or a combination of coursework and research are identified as Special Students. Admission to the DSR as a Special Student is for one term or one year only and carries with it no commitment for further study. Special Students are enrolled in the Graduate School and have all the privileges of a student, including receiving a Yale transcript with coursework and grades listed. Students enrolled as special students are not eligible for financial aid or student loans.

The first step to apply as a Special Student is to contact the department with which you wish to affiliate. You must have permission from the department to apply before submitting your application.

Requirements/General Info:

- A Bachelor's degree (or equivalent) required.
- The deadline for receipt of application materials is July 1 for the Fall semester and November 15 for the Spring semester.
- You may enroll in up to four courses a term, for a maximum of two terms (one year).
- You may petition to enroll for up to an additional two terms (one year), for a total of two years of study.
- International applicants may only be admitted as full-time Special Students.
- Special Students are not eligible for financial aid from the Graduate School and must demonstrate sufficient financial support at the time of application.
- You must first consult the department directly to verify they will consider Special Students.

A complete application contains the following:

- The Division of Special Registration Special Student application (http://www.yale.edu/graduateschool/admissions/forms/SS%20Application. pdf).
- A 500 1000 word statement concerning your past work, preparation for intended studies, and relevant background. Please also list the courses (be as specific as possible) that you plan to enroll in while at Yale. If, in addition to taking courses, you plan on conducting research, please describe your research project and the name(s) of the Yale faculty member(s) you will be working with.
- The Graduate School application fee of (Check or Money Order only)

- Two letters of recommendation from individuals who can evaluate your academic work, intellectual ability or academic potential for graduate work.
- Official transcripts from each college or university attended.
- GRE scores are required. Contact ETS to have them released to code 3987.
- Proof of health insurance or intent to purchase health insurance through the Yale Health Plan.
- Proof of funding to demonstrate how you will support yourself financially (tuition, cost of living, and health insurance) while at Yale.

Additional information for international applicants and non-U.S. citizens:

- TOEFL scores are required for applicants whose native language is not English and who have not studied for at least two years at a university where English is the primary language of instruction. Contact ETS to have them released to code 3987.
- The Office of International Students and Scholars (OISS) will issue a visa to non-U.S. citizens who are accepted and can demonstrate sources of funding for an estimated \$2,272/month for cost of living expenses and who demonstrate sufficient insurance coverage. See http://www.yale.edu/oiss/immigration/common/index.html for more information.

Note that some Yale departments/programs will not accept coursework completed while enrolled as a Special Student to count toward a graduate degree should the student later be accepted into a graduate degree program at Yale University.

Please submit your complete application, including all supplemental materials and the application fee, directly to the Office of Graduate Admissions at the address listed on the application. All admission decisions are communicated in written form by the Graduate School of Arts and Sciences, not by individual departments or programs. Only letters sent directly from the Graduate School may be considered official notifications of admission.

Visiting Assistant in Research

Students who are currently enrolled in a graduate program at another university and who wish to pursue full time dissertation-level research may be admitted to the Division of Special Registration as a "Visiting Assistant in Research" (VAR).

Requirements/General info:

- You must be currently enrolled in a graduate program (Masters or Ph.D.) at another institution and have already completed a bachelor's degree (or equivalent).
- You may not enroll in coursework while at Yale.
- The VAR program is a full-time program.

- The date for the beginning and ending of your study at Yale is flexible and should be discussed with your Yale adviser prior to submitting your application. You may apply to enroll for up to one year. You may petition to extend your initial enrollment for up to one additional year after first year is complete. VAR appointments have a maximum cumulative time limit of 2 years.
- VARs are not eligible for financial aid from the Yale Graduate School and must demonstrate sufficient financial support at the time of application.
- International applicants are encouraged to submit their application at least 2-3 months prior to their anticipated start date.

A complete application contains the following:

• The Division of Special Registration Visiting Assistants in Research (VAR) application

(http://www.yale.edu/graduateschool/admissions/forms/Var%20Application.pdf).

- A personal statement of 500 1000 words describing your past work, your preparation for the proposed research, and your proposal research at Yale. The personal statement must also include the length of your study at Yale (start and end dates) and information on how you will be supported financially (tuition, cost of living, and health insurance) while at Yale. This may be from personal sources, family, external grants, a Yale faculty member, etc.
- Proof of sufficient funding to cover your expenses while at Yale.
- Proof of health insurance. Health insurance can be purchased through Yale University Health Services. http://yalehealth.yale.edu/
- The Graduate School application fee (Check or Money Order only).
- A letter of support from the faculty member/adviser at Yale with whom you will be working. This letter should contain the start and end dates of your research. If the faculty adviser will provide financial assistance (for stipend, tuition, health coverage, etc.), this assistance should be described in detail.
- One letter of recommendation from your home institution indicating that you are in good academic standing.
- Proof that you will be enrolled as a full-time, degree seeking, student at your home institution during your time at Yale.
- Official transcripts from each college or university you have attended.
- GRE scores are NOT required

Additional information for international applicants and non-U.S. citizens:

• TOEFL scores may be required by some departments/programs. Check directly with the department/program to which you are applying.

• OISS will issue a visa to non-U.S. citizens who are accepted and can demonstrate sources of funding of an estimated \$1,960/month for cost of living expenses and who demonstrate sufficient insurance coverage. See http://gsas.yale.edu/life-yale/international-student-resources

Please submit your complete application, including all supplemental materials and the application fee directly to the Office of Graduate Admissions at the address listed on the application. All admission decisions are communicated in written form by the Graduate School of Arts and Sciences, not by individual departments or programs. Only letters sent directly from the Graduate School may be considered official notifications of admission.

References

Adams E. (2019). Future proofing: The Nursing Now Campaign. *Nurs Adm Q*, 43(1), 5-9.

American Association of Colleges of Nursing. (5/11/2020). Ph.D. in Nursing 2020.

Available from: https://www.aacnnursing.org/News-Information/Research-Data-Center/Ph.D.

- Enders T, Morin, A., Pawlak, B. (2016). *Advancing Healthcare Transformation: A New Era for Academic Nursing*. Washington DC: American Association of Colleges of Nursing.
- McCauley L. (2020). Nursing Doctoral Education in 2020: Embracing Our Challenges and Seizing Opportunities. Naples, FL: AACN Doctoral Conference.
- Owen, W.F., Carmona ,R., & Pomeroy, C. (2020). Failing another national stress test on health disparities. *JAMA*, *323(19)*,1905-1906. doi:10.1001/*jama*.2020.6547
- Thompson, L.M., Zablotska, L.B., Chen, J.L., et al. (2018). Development of quantitative research skills competencies to improve Doctor of Philosophy Nursing student training. *J Nurs Educ.*,57(8),483-8.

Wyman, J.F. & Henly, S.J. (2015). Ph.D. programs in nursing in the United States: visibility of American Association of Colleges of Nursing core curricular elements and emerging areas of science. *Nurs Outlook.* 63(4), 390-7.

Yancy, C.W. (2020). COVID-19 and African Americans. *JAMA*, *323(19)*, 1891-1892. doi:10.1001/jama.2020.654