## Nursing Science, Ph.D.

The Doctor of Philosophy (Ph.D.) in Nursing Science is designed to prepare nurse scientists with expertise in clinical-translational research methods to advance the scholarly discipline and to contribute to the growing body of knowledge in the field of nursing. The program emphasizes the combination of translational science methods with traditional models for research to comprehensively address health and healthcare needs of local, national and global communities.

To be considered for admission, applicants must have a Bachelor or Master of Science degree in Nursing from a regionally and CCNE accredited institution with degree standards equivalent to the University of California. Degrees from international programs must have accreditations satisfactory to the Graduate Division and the Sue and Bill Gross School of Nursing and be equivalent to UC educational requirements.

Applicants are required to submit transcripts showing a minimum grade point average (GPA) of 3.2 for undergraduate work or 3.5 for graduate work from an accredited institution and a scholarship record commensurate with requirements of the Graduate Division and the Sue and Bill Gross School of Nursing. Previous education at the undergraduate and/or graduate levels will be evaluated for equivalency of design, theory, and intensity as a means of determining whether the prior degree standards are equivalent to those required by the UC system. If English is not the applicant's first language, the applicant must demonstrate proficiency in English prior to admission commensurate with that identified by the Graduate Division for the Test of English as a Foreign Language (TOEFL) or TOEFL Internet-Based (TOEFL iBT).

Applicants who did not have a course in descriptive and inferential statistics within the last five years must complete a course similar to STATS 7 prior to admission. Applicants must have an undergraduate- or graduate-level research course in order to apply. Applicants who have had intensive research experience may submit a request to waive this prerequisite; there are no guarantees that this request will be granted. Each applicant's file will be reviewed on a case-by-case basis.

In addition, applicants are required to submit:

- A statement of objectives for graduate study compatible with the areas of focus below (please see the Ph.D. section of the School of Nursing website (http://www.nursing.uci.edu/doctor-philosophy.asp) for more details);
- A resume or *Curriculum Vitae* detailing educational background, professional work, previous research, and volunteer work as well as other relevant information such as fluency in another language;
- · Examples of scholarly work; and
- Evidence of licensure as a registered nurse.

Letters of recommendation are not required. A personal interview will be required of applicants considered for admission. Acceptance is based on materials submitted, research interests related to those of faculty, and results of the interview process.

The specific field of emphasis for the Ph.D. program is Nursing Science. Generally, this involves increasing the quality of life for the community that nurses serve. Consistent with faculty research expertise, the Ph.D. program will specifically promote the development of scientific and theoretical expertise that contributes to scholarly endeavors in six key areas: integrative health and wellness promotion, community health, philosophical and theoretical foundations in nursing, health services and practice, digital technology and health, health disparities and diversity. These areas of research emphasis intersect as they contribute to healthy communities. Emphasis will be placed on building expertise in the use of translational science methods in conjunction with traditional models for research. Research emphasis areas are described below.

Integrative Health and Wellness Promotion. Integrative health is an approach to care that puts the patient at the center and addresses the full range of physical, emotional, mental, social, spiritual, and environmental influences that affect a person's health. Employing a personalized strategy that considers the patient's unique conditions, needs and circumstances, integrative health uses the most appropriate interventions from an array of scientific disciplines to heal illness and disease and help people regain and maintain optimum health and wellness. Students choosing this focus may work with UCI faculty (Nursing Science and others) on stress and coping, women's health, whole person health and wellness, the distribution of health-related events and social determinants of health influencing these events, to name a few specific areas.

**Community Health.** Community health is a blend of primary health care and nursing practice with public health nursing to provide care that is preventive, curative, and rehabilitative. The philosophy of care is based on the belief that care directed to the individual, the family, and the group contributes to the health care of the population as a whole. Students choosing this focus will have an opportunity to study the development of community activities that contribute to the promotion of, education about, and maintenance of good health. These activities require comprehensive health programs that pay special attention to social and ecological influences and specific populations at risk.

Philosophical and Theoretical Foundations in Nursing. While empirical scholarship is a critical element of nursing, generating evidence for sound interventions that improve the health of patients, families, and communities, philosophical/theoretical scholarship is also vital for the development of the discipline. Students choosing this focus will have the opportunity to work with leading scholars to advance understanding of the nature of nursing science and practice.

Health Services and Practice. Health policy and the economics of delivering health care are important issues affecting health outcomes. Students choosing this focus will have an opportunity to examine the implications of a variety of policies and services on health and health system outcomes.

There will be opportunities to study with researchers who have expertise in health care system management, law, organizational theory and behavior, and quality of care.

**Digital Technology and Health.** Digital technology is the integrated use of electronic information and telecommunications technology to support remote clinical health care, patient and professional health-related education, public health and health administration to deliver relevant and up-to-date, realtime, information to researchers in a more efficient way, given the sheer amount of data being produced every day. Students choosing this focus may work with UCI faculty (Nursing Science and others) on support and enhancement of a collaborative informatics community; promotion of software standards for interoperability; growth of collaborative innovation across informatics tools, methods and processes; data science education for clinicians and researchers; and development of novel methods and tools for the evaluation of the impact of these activities to enhance health care through data and informatics.

Health Disparities and Diversity. The focus on Health Disparities acknowledges that there are individuals, families, and communities who are not equally treated in the quest for health. Many do not have equal access to quality health care nor the means to achieve an equal level of desired health outcomes. The emphasis will examine these health disparities among diverse populations who encounter differences in treatment and outcomes. Students choosing this focus will have an opportunity to work with diverse community members in Orange County and beyond, and they will be mentored by researchers who study the experiences of these community members.

Ph.D. students are required to complete 50 quarter units of formal course work selected in part by consultation with the faculty advisor, subject to review by a faculty oversight committee. These courses will cover the necessary fundamental and methodological principles, and accommodate crossdisciplinary themes in nursing science.

Students will have two formal examinations along the process toward writing their thesis. First they will write a comprehensive examination following completion of required course work and electives (50 required quarter units). The next benchmark will be the proposal defense (qualifying exam), in which students will advance to candidacy upon successful presentation of an original dissertation research proposal and oral defense of the proposal. Ph.D. completion requires submission of an acceptable dissertation and oral defense. The normative time to degree is four years, and the maximum time permitted is seven years.

Required Courses	
NUR SCI 211	Ph.D. Seminar: Nursing and Interdisciplinary Research to Improve Human Health <sup>1</sup>
NUR SCI 212	Philosophy, Science, and Nursing: Comparisons and Critiques
NUR SCI 213	Measurement of Health-Related Behavior
NUR SCI 223A	Biostatistics for Health Sciences I
NUR SCI 224	Research Designs in Nursing Science
NUR SCI 226	Theoretical and Conceptual Frameworks
NUR SCI 227A	Grant Writing I
NUR SCI 296	Doctoral Dissertation Reading and Writing
Elective Courses	
At least 20 units of elective courses contributing to the area of proposed research must be taken. Elective courses may be taken inside or outside of the School of Nursing and must be chosen in consultation with the student's faculty advisor.	
Examples of potential electives:	
NUR SCI 223B	Biostatistics for Health Sciences II
NUR SCI 227B	Grant Writing II
NUR SCI 246	Qualitative Research Designs in Nursing Science
NUR SCI 247	Quantitative Research Designs in Nursing Science
NUR SCI 251	Nursing Informatics

<sup>1</sup> Complete three seminars for 6 units.