

## UMSL College of Nursing

### Doctor of Nursing Practice Program Courses

**N7200 Nursing Science (3 Cr.) Pre/Co-requisite(s):** Admission to a doctoral study in nursing

**Course Description:** This course examines the state of scientific knowledge in nursing research and advanced clinical practice. Students will analyze the development of major streams of scientific development in nursing and gaps that remain in understanding critical nursing and health-related phenomena, interventions, and outcomes. The course will address the interrelationships between nursing science and scientific developments in other disciplines from the perspectives of health outcomes, population health indices, and policy implications of scientific progress. Students will evaluate advances in biophysiological, psychosocial, sociocultural, health systems, and health economics research and their implications for nursing care and outcomes. They will collaborate in identifying gaps in the state of the science in high priority topical areas and gaps between recommended best practices and current clinical practice and health policy, and in determining next steps to improve nursing care and outcomes based on science.

**N7211 Biostatistics 1 (3 Cr.) Prerequisites:** Consent of instructor

**COURSE DESCRIPTION:** This course provides a comprehensive understanding of the general linear model. Data description, logic of sampling and test statistics, hypothesis testing, type 1 and type 2 errors are included. Techniques include one-way ANOVA (analysis of variance); planned comparisons, post-hoc tests and trend analysis; factorial ANOVA; repeated measures designs and mixed randomized repeated designs; multiple comparison techniques; and simple and multiple regressions.

**N7220 Leadership in Practice (3 Cr.) Prerequisites:** None

**Course Description:** This course provides students with the opportunity to develop and refine critical leadership skills. Emphasis is on using models and theories that facilitate interprofessional collaboration to achieve optimal health outcomes. The focus is effective communication and leadership methods necessary to establish successful inter-professional teams. Students will enhance skills in verbal, written and electronic communication; team leadership; and creating and sustaining health related initiatives. Through advanced understanding of the inter-professional dimension of health care, students will facilitate collaboration and remove barriers to providing safe, timely, effective, efficient, equitable and patient centered care in a complex environment.

**N7230 Epidemiology (3 Cr.) Prerequisite:** N7211 or consent of instructor

**Course Description:** This course introduces the fundamental principles and methods of epidemiology. Topics to be covered include the historical perspective of epidemiology, measures of disease occurrence and of association, clinical epidemiology, disease screening, causal inference, and analytic study design. Students will design epidemiologic studies, and utilize common statistical tests. Emphasis will be placed on case control studies, cohort studies, clinical epidemiology, and infectious disease epidemiology.

**N7240 Health Informatics (Cr. 3) Prereq:** Consent of instructor

**Course Description:** This course explores information systems and computer technologies that can improve the health of individuals, families, communities and populations by optimizing information management and communication. Focus areas include the electronic medical record, technologies to improve patient safety, standards for privacy and security, tele-health systems to improve healthcare access to underserved populations, use of web-enhanced technologies for research translation, and strategies to provide data for decision making and evidence based databases. Emphasis is placed on

developing competence in technology use for the purpose of program evaluation, establishing healthcare quality, and improving healthcare delivery to diverse populations in complex healthcare settings.

**N7250 Frameworks for Health Care Delivery (3 Cr.) Pre/Co-requisites:** N7220 or consent of instructor

**Course Description:** This course is designed to provide students with a framework to understand the system through which health care is delivered and financed and explores the cultural and psychosocial contributors to health care. The focus is to provide students with knowledge about complex health care systems, government and private reimbursement structures, quality and patient safety initiatives, and legal mandates affecting health care delivery.

**N7260 Program and Practice Evaluation (3 Cr.) Prereq:** N7230 or consent of instructor.

**Course Description:** Includes principles and procedures for assessing the quality and effectiveness of programs, projects and materials related to planned interventions and systems changes in health settings. Using a logic model, practice and programs will be evaluated and presented to agencies. Values, ethical and political issues, particularly those relevant to race/ethnicity and gender will be emphasized.

**N7270 Policy Application for Improved Health Outcomes (3 Cr.) Pre/Co-Req:** N6106 or equivalent and N7230

**Course Description:** Students learn how to effectively translate and disseminate knowledge from nursing and other health sciences to policy makers and stakeholders in order to form collaborations to affect change at various levels of the policy process. Topics to be covered include policy analysis, policy development, collaboration and negotiation specific to the policy process, building social and political capital and garnering resources to assure effective policy implementation. Students will utilize population health data, policy analysis, and policy development skills to define, shape and implement culturally competent health policy.

**N7291 DNP Clinical Scholarship 1 (3 Cr.) Pre-req:** All DNP coursework or consent of instructor

**Course Description:** This experience provides additional opportunities for practice expertise development to create change in a targeted population and complex healthcare environments. Students will develop skills to assess and diagnose healthcare systems and identify evidenced-based strategies to improve health outcomes. Included in this experience is 150 hours of precepted clinical experience with a licensed advance practice nurse or physician.

**N7292 Clinical Scholarship 2 (3 Cr.) Prereq:** N7291

**Course Description:** This experience provides additional opportunities for practice expertise development to create change in a targeted population and complex healthcare environments. Students will develop strategies to implement evidenced-based strategies to improve health outcomes. Included in this experience is 200 hours of precepted clinical experience with a licensed advance practice nurse or physician.

**N7293 Clinical Scholarship 3 (3 Cr.) Pre-req:** N7202

**Course Description:** This experience provides additional opportunities for practice expertise development with a targeted population in a complex healthcare environment. Students will evaluate

evidenced-based clinical projects and health outcomes. Included in this experience is 200 hours of precepted clinical experience with a licensed advance practice nurse or physician.

**N7299 DNP Seminar (1-3 Cr.) Pre-req:** All DNP required courses or consent of instructor.

**Course Description:** This DNP Seminar provides opportunity to synthesize and analyze knowledge. Course objectives will be individualized to address student's learning needs and will be outlined in a learning contract formulated with the DNP faculty advisor.

**(Note:** Continuous registration is required until DNP is completed.)

**N7401 Research Institute 1 (2 Cr.) Pre/Co-requisites:** Admission to a doctoral study in nursing

**Course Description:** This course provides an introduction to the process of becoming a research scientist or a translational investigator. Content will include the ethical and responsible conduct of research or clinical project, core elements, the emerging guidelines, relevant policies and procedures, and the impact to the researcher in day-to-day activities. This course also includes literature reviews, scholarly writing, technology in the research process, developing a program of scholarship and effective time management.

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