Nursing Science (NUR SCI)

Courses

NUR SCI 50. Nutrition Across the Lifespan. 4 Units.

Focuses on the relationship between diet and health, and how the human body responds to different diets and food components. Emphasizes how diet interacts with activity and the impact of exercise or sedentary lifestyle on health.

Restriction: Nursing Science Majors have first consideration for enrollment.

(II)

NUR SCI 90. Introduction to Pain Medicine. 2 Units.

Gives students introductory knowledge in pain medicine.

NUR SCI 92. Compassion in Health Care. 1 Unit.

An overview of the importance of compassion in health care, providing examples from a variety of health care professions through lectures and discussion.

Grading Option: Pass/no pass only.

NUR SCI 101. Introduction to Nursing Informatics. 2 Units.

Covers topics relevant to evidence-based practice; nursing informatics as a specialty; electronic health records and clinical informatics; clinical decision support and decision analysis; using informatics to promote community/population health; telenursing and remote access telehealth; and ethical issues in nursing informatics.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 201.

NUR SCI 108W. Frameworks for Professional Nursing Practice. 5 Units.

Conceptual frameworks for professional practice. Scope of professional nursing, jurisprudence and ethics, professional interpersonal relationships, and health care delivery systems in the context of the social, political, and economic environments. Socialization of the student for professional roles in nursing.

Corequisite: NUR SCI 109A and NUR SCI 119

Prerequisite: BIO SCI D170 and PHRMSCI 120 and PHRMSCI 120L and BIO SCI M115. BIO SCI D170 with a grade of C or better. PHRMSCI 120L with a grade of C or better. PHRMSCI 120L with a grade of C or better. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Upper-division students only. Nursing Science Majors only.

Concurrent with NUR SCI 208.

(lb)

NUR SCI 109A. Physical Assessment. 4 Units.

Development of skills in communication, interviewing, functional and physical health assessment across the life-span, the art and science of human care, and clinical judgment. Provides in-depth introductory review/synthesis of physical assessment skills and knowledge covering the life-span.

Corequisite: NUR SCI 108W and NUR SCI 119

Prerequisite: BIO SCI M115 and BIO SCI D170 and PHRMSCI 120 and PHRMSCI 120L. BIO SCI M115 with a grade of C or better. BIO SCI D170 with a grade of C or better. PHRMSCI 120 with a grade of C or better. PHRMSCI 120L with a grade of C or better.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 209A.

NUR SCI 109B. Nursing Skills. 4 Units.

Provides an in-depth introductory review and synthesis of physical assessment skills covering the lifespan, application of the nursing process, nursing interventions, nursing evaluations, patient care management, and the development of critical thinking in nursing practice.

Corequisite: NUR SCI 117 and NUR SCI 121A

Prerequisite: NUR SCI 109A and NUR SCI 108W and NUR SCI 119. NUR SCI 109A with a grade of C or better. NUR SCI 108W with a grade of C or

better. NUR SCI 119 with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 209B.

NUR SCI 114A. Applied Pharmacology I. 2 Units.

Presents principles of pharmacology applied to interventions in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education are included.

Corequisite: NUR SCI 110W and NUR SCI 118A and NUR SCI 112LA

Prerequisite: BIO SCI E109 and BIO SCI D170

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 264A.

NUR SCI 114B. Applied Pharmacology II. 2 Units.

Presents principles of pharmacology applied to interventions in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education are included.

Corequisite: NUR SCI 118B and NUR SCI 112LB and NUR SCI 125 and NUR SCI 135 Prerequisite: NUR SCI 114A and NUR SCI 118A and NUR SCI 110W and NUR SCI 112LA

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 264B.

NUR SCI 116. Human Growth and Development through the Lifespan. 4 Units.

Examines theories and concepts of typical human development throughout the life cycle, from the time of conception through adulthood, and familiarizes students with the many forces that shape individual development, including family, society, and culture.

Prerequisite: PSYCH 7A or PSCI 9. PSYCH 7A with a grade of C or better. PSCI 9 with a grade of C or better

Restriction: Nursing Science Majors only.

NUR SCI 117. Applied Pharmacology. 4 Units.

Presents principles of pharmacology applied to interventions in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education are included.

Corequisite: NUR SCI 109B and NUR SCI 121A

Prerequisite: NUR SCI 108W and NUR SCI 109A and NUR SCI 119. NUR SCI 108W with a grade of C or better. NUR SCI 109A with a grade of C or

better. NUR SCI 119 with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 217.

NUR SCI 118A. Human Health and Disease I. 2 Units.

Presents content on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Emphasis on critical thinking, application of concepts to clinical practice, and related research.

Corequisite: NUR SCI 114A and NUR SCI 112LA and NUR SCI 110W

Prerequisite: BIO SCI E109 and BIO SCI D170

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 268A.

NUR SCI 118B. Human Health and Disease II. 2 Units.

Presents content on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Emphasis on critical thinking, application of concepts to clinical practice, and related research.

Corequisite: NUR SCI 114B and NUR SCI 112LB and NUR SCI 125 and NUR SCI 135 Prerequisite: NUR SCI 112LA and NUR SCI 114A and NUR SCI 118A and NUR SCI 110W

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 268B.

NUR SCI 119. Pathophysiology. 4 Units.

Presents content on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Emphasis on critical thinking, application of concepts to clinical practice, and related research.

Corequisite: NUR SCI 108W and NUR SCI 109A

Prerequisite: BIO SCI M115 and BIO SCI D170 and PHRMSCI 120 and PHRMSCI 120L. BIO SCI M115 with a grade of C or better. BIO SCI D170 with a grade of C or better. PHRMSCI 120 with a grade of C or better. PHRMSCI 120L with a grade of C or better.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 219.

NUR SCI 121A. Medical Surgical Nursing I. 4 Units.

Introduction to medical surgical nursing application focused on the older adult population. Students assess, interpret, and provide priority nursing interventions with an emphasis the unique factors influencing nursing management of older adults.

Corequisite: NUR SCI 117 and NUR SCI 109B

Prerequisite: NUR SCI 108W and NUR SCI 109A and NUR SCI 119. NUR SCI 108W with a grade of C or better. NUR SCI 109A with a grade of C or

better. NUR SCI 119 with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 221A.

NUR SCI 121B. Medical Surgical Nursing II. 6 Units.

Examines nursing assessment and advanced nursing management for acute and chronic health problems within the inpatient hospital setting. Emphasizes assessment, health history, diagnostic reasoning and nursing prioritization of care in medically complicated patients.

Corequisite: NUR SCI 101 and NUR SCI 128

Prerequisite: NUR SCI 109B and NUR SCI 117 and NUR SCI 121A. NUR SCI 109B with a grade of C or better. NUR SCI 117 with a grade of C or

better. NUR SCI 121A with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 221B.

NUR SCI 125. Research Methods and Applications in Health Care. 4 Units.

Foundational concepts of research in health care. Emphasizes critical evaluation and interpretation of research for application in practice.

Prerequisite: STATS 7 or STATS 8 or SOCIOL 10A or SOC SCI 10A or PSYCH 10A. STATS 7 with a grade of C or better. STATS 8 with a grade of C or better. SOCIOL 10A with a grade of C or better. SOCIOL 10A with a grade of C or better. Satisfactory completion of Lower-Division Writing requirement is recommended.

Restriction: Nursing Science Majors only.

NUR SCI 128. Human Behavior and Mental Health Care. 7 Units.

Biopsychosocial and cultural influences on promotion and restoration of mental health in adults and adolescents. Assessment, classification, and care of clients with mental health problems and/or substance abuse. Concurrent practicum in adult/adolescent inpatient psychiatric units and outpatient mental health clinics.

Corequisite: NUR SCI 101 and NUR SCI 121B

Prerequisite: NUR SCI 109B and NUR SCI 117 and NUR SCI 121A. NUR SCI 109B with a grade of C or better. NUR SCI 117 with a grade of C or

better. NUR SCI 121A with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 228.

NUR SCI 133. Complementary and Integrative Health . 2 Units.

Complementary and integrative healthcare emphasized a holistic, patient-focused approach to healthcare and wellness. Key research is critically evaluated and applications for improving patient care emphasized. Knowledge and skills are developed through lectures, guest speakers, and discussion.

NUR SCI 144. Personal and Social Resilience in the Age of the Climate Crisis. 2 Units.

We live in a rapidly changing world with the climate crisis and interrelated global crises ("the polycrisis"). Students gain invaluable personal and social resilience skills including mindfulness and collaborative high impact projects to navigate and build a meaningful future.

Grading Option: Pass/no pass only.

NUR SCI 171. Community-Based Health Care. 6 Units.

Epidemiology, primary health care promotion, and disease prevention applied to nursing care of individuals, families, groups, and communities. Includes sociocultural, political, economic, and environmental influences. Concepts and methods of assessing populations and communities incorporated in concurrent practicum.

Corequisite: NUR SCI 175 and NUR SCI 179B

Prerequisite: NUR SCI 174 and NUR SCI 176 and NUR SCI 179AW. NUR SCI 174 with a grade of C or better. NUR SCI 176 with a grade of C or

better. NUR SCI 179AW with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 271.

NUR SCI 172. Pediatrics: Care of Children and Families. 6 Units.

Provides didactic and clinical experiences in nursing management of infants, children, and adolescents with acute, chronic and/or life-threatening conditions. Incorporates concepts of family-centered care, teamwork and collaboration, patient safety, quality improvement and informatics, utilizing an evidence-based practice approach.

Corequisite: NUR SCI 173

Prerequisite: NUR SCI 101 and NUR SCI 116 and NUR SCI 121B and NUR SCI 128. NUR SCI 101 with a grade of C or better. NUR SCI 116 with a grade of C or better. NUR SCI 121B with a grade of C or better.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 272.

NUR SCI 173. Maternity and Women's Health Care. 7 Units.

Provides didactic and clinical experiences in nursing management of women's wellness across the lifespan, the childbirth process, and newborn care. Incorporates concepts of family-centered care, teamwork and collaboration, patient safety, quality improvement and informatics, utilizing an evidence-based practice approach.

Corequisite: NUR SCI 172

Prerequisite: NUR SCI 101 and NUR SCI 116 and NUR SCI 121B and NUR SCI 128. NUR SCI 101 with a grade of C or better. NUR SCI 116 with a grade of C or better. NUR SCI 121B with a grade of C or better.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 273.

NUR SCI 174. Critical and Specialty Health Care. 6 Units.

Delivery of patient-centered care for individuals with life-threatening alterations in health status utilizing technology and pharmacology for life support. Concurrent practicum in critical care units emphasizes collaboration, team work, and quality improvement in safe care delivery.

Corequisite: NUR SCI 176 and NUR SCI 179AW

Prerequisite: NUR SCI 172 and NUR SCI 173. NUR SCI 172 with a grade of C or better. NUR SCI 173 with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 274.

NUR SCI 175. Clinical Preceptorship. 4 Units.

Focuses on in-depth clinical nursing practice and preparation for transition to independent practice. Students are mentored by a preceptor who is an expert clinician in the clinical area and guided through critical thinking and clinical decision-making exercises.

Corequisite: NUR SCI 171 and NUR SCI 179B

Prerequisite: NUR SCI 174 and NUR SCI 176 and NUR SCI 179AW. NUR SCI 174 with a grade of C or better. NUR SCI 176 with a grade of C or

better. NUR SCI 179AW with a grade of C or better

Grading Option: Pass/no pass only.

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 275.

NUR SCI 176. Leadership and Management in Health Care. 4 Units.

Principles, concepts, and theories related to organizations, management, leadership, decision-making, and group process applied to the delivery of health care. The professional nurse using evidenced-based practice, collaboration, and informatics is incorporated in concurrent practicum emphasizing safe patient care delivery.

Corequisite: NUR SCI 174 and NUR SCI 179AW

Prerequisite: NUR SCI 172 and NUR SCI 173. NUR SCI 172 with a grade of C or better. NUR SCI 173 with a grade of C or better

Restriction: Nursing Science Majors only.

Concurrent with NUR SCI 276.

NUR SCI 179AW. Scholarly Concentration I. 2 Units.

Focuses on analysis and use of evidence to improve nursing practice. Emphasis is to develop critical analysis skills synthesizing a body of research evidence for clinical issues on a formal, collaborative written paper.

Corequisite: NUR SCI 174 and NUR SCI 176

Prerequisite: NUR SCI 172 and NUR SCI 173. NUR SCI 172 with a grade of C or better. NUR SCI 173 with a grade of C or better

Restriction: Nursing Science Majors only.

(lb)

NUR SCI 179B. Scholarly Concentration II. 2 Units.

Continuation of evidence-based research and application for nursing practice. Emphasis is to develop a collaborative quality improvement project with clinical nurses applying the evidence to improve nursing practice.

Corequisite: NUR SCI 171 and NUR SCI 175

Prerequisite: NUR SCI 174 and NUR SCI 176 and NUR SCI 179AW. NUR SCI 174 with a grade of C or better. NUR SCI 176 with a grade of C or

better. NUR SCI 179AW with a grade of C or better

Restriction: Nursing Science Majors only.

NUR SCI 199. Independent Study in Nursing Science. 1-4 Units.

Original research with Nursing Science faculty.

Repeatability: May be repeated for credit unlimited times.

NUR SCI 200. Research Methods and Evaluation for Evidence-Based Practice. 3 Units.

Equips students with the essential knowledge and skills to understand, apply, and synthesize clinical research, relevant to nursing and health promotion.

Repeatability: May be taken for credit 2 times.

Restriction: Graduate students only.

NUR SCI 201. Introduction to Nursing Informatics. 2 Units.

Covers topics relevant to evidence-based practice, nursing informatics as a specialty, electronic health records and clinical informatics, clinical decision support and decision analysis, using informatics to promote community/population health, telenursing and remote access telehealth, and ethical issues in nursing informatics.

Restriction: Graduate students only.

Concurrent with NUR SCI 101.

NUR SCI 202. Compassion, Communication, and Care of Underserved Populations. 3 Units.

Addresses the root causes of health disparities experienced by underserved at-risk populations (e.g., the homeless, people of color, victims of violence) using a historical, sociocultural, behavioral, and personal lens.

Restriction: Graduate students only.

NUR SCI 208. Frameworks for Professional Nursing Practice. 4 Units.

Focuses on the scope and standards of professional nursing practice. Topics address the professional, political, and economic contexts of nursing practice, with an emphasis on jurisprudence and ethics, professional interpersonal relationships, and nursing's role in the care delivery system.

Restriction: Graduate students only.

Concurrent with NUR SCI 108W.

NUR SCI 209A. Physical Assessment. 4 Units.

Focuses on the development of skills in therapeutic communication, interviewing, functional assessment across the lifespan, the art and science of human care, and clinical judgment.

Corequisite: NUR SCI 202 and NUR SCI 208 and NUR SCI 219

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 109A.

NUR SCI 209B. Nursing Skills. 4 Units.

Focuses on the development of skills in therapeutic communication, interviewing, functional assessment across the lifespan, the art and science of human care, and clinical judgment.

Corequisite: NUR SCI 217 and NUR SCI 221A

Prerequisite: NUR SCI 202 and NUR SCI 208 and NUR SCI 209A and NUR SCI 219. NUR SCI 202 with a grade of B or better. NUR SCI 208 with a grade of B or better. NUR SCI 219 with a grade of B or better.

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 109B.

NUR SCI 210. Advanced Pathophysiology. 3 Units.

Principles of normal body functioning and pathophysiologic changes that occur as a result of compensatory mechanisms and disease. Physical and psychological aspects of altered health are explored from the cellular to the level of the total body system.

Restriction: Graduate students only.

NUR SCI 211. Ph.D. Seminar: Nursing and Interdisciplinary Research to Improve Human Health. 2 Units.

Students learn from interdisciplinary scientists about aspects of applied health-related research. Students are introduced to new paradigms, theories, approaches, and analytical methods in health-related research. Ph.D. Nursing Science students and Ph.D. students in other disciplines are encouraged.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

NUR SCI 212. Philosophy, Science, and Nursing: Comparisons and Critiques. 4 Units.

Development of philosophy and science in relation to nursing science, scholarship, and practice; emphasis on inquiry, scientific reasoning, and contemporary philosophical thought; historical and contemporary influences on nursing science theory development; evaluation/analysis of interdisciplinary theory and application to nursing research.

Restriction: Graduate students only.

NUR SCI 213. Measurement of Health-Related Behavior. 4 Units.

Provides a comprehensive understanding of psychometric principles, analyses, and emerging concepts like Intensive Longitudinal Methods to measure behavior in natural contexts using newer technologies (e.g., smartphones, wearable sensors, and Internet of Things). Students from different disciplines are encouraged.

Prerequisite: Recommended: a graduate-level statistics course.

Restriction: Graduate students only.

NUR SCI 215. Health Promotion/Disease Prevention. 3 Units.

Incorporates principles of health promotion and disease prevention to provide culturally sensitive, evidence-based care for individuals, families, and communities. Focuses on critically analyzing and integrating current prevention guidelines to develop individualized plans of care and provide holistic and integrative education.

Restriction: Graduate students only.

NUR SCI 216. Critical Thinking Through Writing Critique. 4 Units.

Aims to stimulate critical thinking by using existing scientific literature to work out the structure of their arguments, evaluate their logical clarity, identify unquestioned assumptions, and link all this to the rigor/appropriateness of any inferences made.

Restriction: Doctor of Philosophy Degree students only. Graduate students only.

NUR SCI 217. Applied Pharmacology. 4 Units.

Principles of pharmacology applied to intervention in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education included. Physical, psychological, social, and cultural factors affecting drug administration.

Corequisite: NUR SCI 209B and NUR SCI 221A

Prerequisite: NUR SCI 202 and NUR SCI 208 and NUR SCI 209A and NUR SCI 219. NUR SCI 202 with a grade of B or better. NUR SCI 208 with a grade of B or better. NUR SCI 209A with a grade of B or better.

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 117.

NUR SCI 219. Pathophysiology. 4 Units.

Focuses on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Emphasis is placed on critical thinking, application of concepts to clinical practice, and related research.

Corequisite: NUR SCI 209A and NUR SCI 208 and NUR SCI 202

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 119.

NUR SCI 220. The Ecology of Healthy Communities. 2 Units.

Nursing science research contributions and opportunities as they pertain to the ecology of health in local, national, and global communities. Emphasis on methodological and ethical issues, research gaps, and clinical translational opportunities.

NUR SCI 221A. Medical Surgical Nursing 1. 4 Units.

Focuses on the introduction of medical surgical nursing application with a focus on the older adult population. Emphasis is placed on identifying and synthesizing the unique set of factors influencing nursing management of individual older adults.

Corequisite: NUR SCI 209B and NUR SCI 217

Prerequisite: NUR SCI 202 and NUR SCI 208 and NUR SCI 209A and NUR SCI 219. NUR SCI 202 with a grade of B or better. NUR SCI 208 with a grade of B or better. NUR SCI 219 with a grade of B or better.

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 121A.

NUR SCI 221B. Medical Surgical Nursing 2 . 6 Units.

Examines nursing assessment and advanced nursing management for acute and chronic health problems within the inpatient hospital setting. Theory content emphasizes assessment, health history, diagnostic reasoning, and nursing prioritization of care in medically complicated patients.

Corequisite: NUR SCI 201 and NUR SCI 228

Prerequisite: NUR SCI 209B and NUR SCI 217 and NUR SCI 221A. NUR SCI 209B with a grade of B or better. NUR SCI 217 with a grade of B or

better. NUR SCI 221A with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 121B.

NUR SCI 222A. Seminar in Clinical Translational Science. 2 Units.

Discussion of clinical translational science methods in the context of nursing science research. Emphasis placed on interdisciplinary and community participatory research approaches.

Prerequisite: Consent of the instructor is required.

Restriction: Graduate students only.

NUR SCI 222B. Seminar in Clinical Translational Science. 2 Units.

Discussion of clinical translational science methods in the context of nursing science research. Emphasis placed on interdisciplinary and community participatory research approaches. Course may be offered online.

Prerequisite: NUR SCI 222A. NUR SCI 222A with a grade of B- or better

Restriction: Graduate students only.

NUR SCI 223A. Biostatistics for Health Sciences I. 4 Units.

Helps students to develop skills necessary for applying statistical principles and practices in health research. This is achieved through in-depth review of existing research articles and hands-on statistical programming exercises.

Restriction: Graduate students only.

NUR SCI 223B. Biostatistics for Health Sciences II. 4 Units.

Introduces advanced methods of statistical analysis and research design used in health research. These include linear, logistic, Poisson regression, and a brief introduction to regression models for correlated data.

Prerequisite: NUR SCI 223A. NUR SCI 223A with a grade of B- or better

Restriction: Graduate students only.

NUR SCI 224. Research Designs in Nursing Science. 4 Units.

Provides an introduction to qualitative and quantitative research designs, methods, and analyses in nursing science. Evaluation of measurement and population issues, data management, ethics, analytical approaches, mixed methods work, and translational potential in the context of research.

Restriction: Graduate students only. Nursing Science Majors only.

NUR SCI 225A. Advanced Pharmacology I. 3 Units.

Principles of pharmacology that serve as a foundation for the pharmacotherapeutic management of patients evaluated and treated by advanced practice nurses. Emphasis includes the application of pharmacokinetic and pharmacodynamic principles.

NUR SCI 225B. Advanced Pharmacology II. 2 Units.

Principles of pharmacology that serve as a foundation for the pharmacotherapeutic management of patients evaluated and treated by advanced practice nurses. Emphasis includes the application of pharmacokinetic and pharmacodynamic principles.

Prerequisite: NUR SCI 225A. NUR SCI 225A with a grade of B or better

Restriction: Graduate students only.

NUR SCI 226. Theoretical and Conceptual Frameworks. 4 Units.

Explores the history, roles, and uses of theory in nursing and health scholarship. Students examine, analyze, and utilize the components of theory, theory construction, concept analysis, and theory evaluation.

Restriction: Graduate students only.

NUR SCI 227A. Grant Writing I. 4 Units.

Introduction to the principles and methods of proposal writing used in preparing grant proposals. Provides content on the process for good proposal development, key elements and sections of proposal, necessary information to include in grant proposal and development of budget.

Prerequisite: NUR SCI 212 and NUR SCI 226

Restriction: Graduate students only.

NUR SCI 227B. Grant Writing II. 2 Units.

Provides a continuation of skill building in preparing a grant proposal, with emphasis on developing the educational training plan, budget and budget justification, the IRB and ethics component, and letters of support for a career-development grant.

Restriction: Graduate students only.

NUR SCI 228. Human Behavior and Mental Health Care. 7 Units.

Focuses on nursing management of individuals across the lifespan with alterations in mental health. Mental health promotion and crisis intervention, chemical dependency, acute and chronic care for psychiatric conditions, rehabilitation, and recovery are addressed.

Corequisite: NUR SCI 221B and NUR SCI 201

Prerequisite: NUR SCI 209B and NUR SCI 217 and NUR SCI 221A. NUR SCI 209B with a grade of B or better. NUR SCI 217 with a grade of B or

better. NUR SCI 221A with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 128.

NUR SCI 229. Pain: Symptoms, Science, and Treatment. 4 Units.

Covers theory, assessment, experience, and management of pain.

Restriction: Graduate students only. Ph.D. graduate standing is required.

NUR SCI 230. Advanced Health and Physical Assessment. 3 Units.

Application of theoretical concepts related to comprehensive health assessment of patients across the lifespan. Analysis, synthesis, and application of comprehensive health assessment data.

Corequisite: NUR SCI 230L

Repeatability: May be taken for credit 2 times.

Restriction: Graduate students only.

NUR SCI 230L. Advanced Health and Physical Assessment Laboratory. 1 Unit.

Clinical laboratory course for the application of concepts related to comprehensive health assessment of patients across the lifespan.

Corequisite: NUR SCI 230

Repeatability: May be taken for credit 2 times.

NUR SCI 231. DNP Prologue . 2 Units.

An onsite 2 ½ day immersive experience that provides an introduction to DNP scholarship and foundations essential for academic success in a doctoral program. Preparatory activities and onsite individual and group assignments are completed.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 232. Leadership and Professional Collaboration in Healthcare. 4 Units.

Explore and debate the relationship between various leadership and collaboration models, theories health care practice, and outcomes. Prepares DNP graduates to assume leadership roles across the healthcare spectrum.

Restriction: Graduate students only.

NUR SCI 233. Appraisal and Translation of Evidence for Practice . 3 Units.

Provides advanced concepts on research methods and measurement strategies that are applicable to support the advanced practice nurse to access, evaluate, and utilize data from various sources including research, quality improvement initiatives, and information technology origins to achieve improvements.

Prerequisite: Consent of the instructor is required.

Restriction: Graduate students only.

NUR SCI 234. Health Politics and Policy. 4 Units.

Participants analyze, apply, and evaluate current health policy-related literature, engage in the process of health policy development within professional, regulatory, or administrative environments, and develop an evidence-based health policy proposal across the spectrum of health care systems.

Restriction: Graduate students only.

NUR SCI 235. DNP Scholarly Project I: Conceptualization and Planning . 1 Unit.

Students gain the knowledge, skills, and abilities necessary to develop an evidence-based project plan and proposal. Structured didactic content and application of the Student's DNP Scholarly Project. First of four DNP Scholarly Project courses.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 236. Social Determinants of Health and Health Equity . 3 Units.

The four components of the Clinical Prevention and Population Health Framework: evidence-based practice, clinical preventive service and health promotion, health systems and policy, and population health and community aspects of practice with emphasis on ethical care delivery.

Restriction: Graduate students only.

NUR SCI 237. DNP Intersession. 2 Units.

Provides DNP students an opportunity to present and receive faculty and peer feedback on their DNP project plan. Recommendations related to practical data collection and information gathering approaches and data analysis are also emphasized.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 238. Foundations of Health Systems and Health Economics. 3 Units.

Foundational understanding of how healthcare is financed in the U.S. Explores economic theories and policies, various types of healthcare organizations, and healthcare delivery systems. Healthcare finance is discussed at national and practice levels.

Restriction: Graduate students only.

NUR SCI 239. The Science of Change, Quality Improvement, and Program Evaluation. 4 Units.

Intro to science of quality improvement and program evaluation. Focus on info system technology and its application in quality improvement. Focus placed on the role of the advanced practice nurse leader in developing and leading clinical quality and safety initiatives.

NUR SCI 240. DNP Scholarly Project II: Proposal. 1 Unit.

Developing a full proposal that reflects synthesis of the student's knowledge from prior coursework and work in an area of interest or expertise under the direction of a faculty mentor. Second of four DNP Scholarly Project course sequence.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 241. DNP Scholarly Project III: Implementation and Evaluation. 1 Unit.

Continued development of knowledge, skills, and abilities to implement the chosen DNP proposal. Students receive direction from a faculty mentor and peer feedback as they become engaged in the microsystem where they are implementing their DNP Scholarly Project.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 242. DNP Scholarly Project IV: Implications . 1 Unit.

Selection and implementation of evidence-based interventions supported through informatics and technological advances and measurement of outcomes in a selected practicum site as applicable. Includes reflection and mapping of the DNP Scholarly Project with DNP Essentials as published.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 243. DNP Epilogue. 2 Units.

DNP students develop DNP competency through the presentation of their project and development of a professional manuscript. Individual direction from the DNP Project Team and peer feedback are provided throughout the course.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 244. A Systems Approach to Health and Well-Being. 2 Units.

Focuses on using a systems approach to promote individual and population wellness. The key topics include complex/dynamic system, analytic tools to measure dynamic/ interrelated processes, critical analysis of literature that utilizes the systems approach to promote holistic well-being.

Restriction: Graduate students only.

NUR SCI 245. Primary Care Adult/Gerontology Acute Common Conditions . 3 Units.

Assessment and management of acute or episodic problems affecting patients and families across the lifespan. Diagnostics, pharmacology, pathophysiology, and therapeutics are integrated. Concepts of quality health care, resource management, and shared-decision making are emphasized.

Prerequisite: NUR SCI 210 and NUR SCI 230. NUR SCI 210 with a grade of B or better. NUR SCI 230 with a grade of B or better

Restriction: Graduate students only.

NUR SCI 246. Qualitative Research Designs in Nursing Science. 4 Units.

Seminar in qualitative research philosophies, methods, and analysis in nursing science clinical research. Consideration of population access and sampling, ethics, data management, analytical approaches, and translational potential.

Restriction: Graduate students only.

NUR SCI 247. Quantitative Research Designs in Nursing Science. 4 Units.

Seminar in experimental and survey research designs, methods, and analysis in nursing science clinical research. Consideration of measurement issues, mixed methods models, population access and sampling, data management, analytical approaches, and translational potential.

Prerequisite: NUR SCI 212. NUR SCI 212 with a grade of B- or better

Restriction: Graduate students only.

NUR SCI 248. Curricular Design for the Health Professions. 3 Units.

Introduces students to the theoretical foundations, essential components, and accreditation standards for curriculum development at the program level. Outcome competencies are addressed as they apply to the development and evaluation of an educational program to meet society's diverse healthcare needs.

NUR SCI 249. Transformational Leadership in Education for the Health Professions. 4 Units.

Students are introduced to the role of the nurse educator as change agent, leader, and scholar and are provided experience in planning learner-centered learning activities that are engaging and effective in achieving desired student performance.

Restriction: Graduate students only.

NUR SCI 250. Primary Care Women's Health. 2 Units.

Primary health care needs of women including adolescent, adult, and aging adults. Emphasizes assessment, diagnosis, prevention, management, and education of common gynecologic and family planning health care needs.

Prerequisite: NUR SCI 210 and NUR SCI 230. NUR SCI 210 with a grade of B or better. NUR SCI 230 with a grade of B or better

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 251. Nursing Informatics . 4 Units.

Provides an overview of nursing informatics topics for practice.

Restriction: Graduate students only.

NUR SCI 252. Applied Data Science for Clinical Research. 4 Units.

Provides hands-on training in applied data science for clinical research.

Restriction: Graduate students only.

NUR SCI 255. Primary Care Obstetrics. 2 Units.

Assessment and management of women during pregnancy. Diagnostics, pharmacology, pathophysiology and therapeutics are integrated. Includes assessment, differential diagnosis, management, patient/family education, and counseling related to normal pregnancy care.

Prerequisite: NUR SCI 210 NUR SCI 230. NUR SCI 210 with a grade of B or better. NUR SCI 230 with a grade of B or better

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 260A. Primary Care Adult/Gerontology Chronic Conditions . 3 Units.

Assessment and management of acute or episodic problems affecting adult and geriatric patients and their families. Diagnostics, pharmacology, pathophysiology, and therapeutic are integrated.

Prerequisite: NUR SCI 245. NUR SCI 245 with a grade of B or better

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 261. Advanced Qualitative and Mixed Methods Research Design. 4 Units.

Discussion and application course on design and implementation of qualitative, mixed methods research. Emphasis on data analysis and management skills, interpretation of findings, reflexivity and ethical considerations in field work, and the development of.

Prerequisite: Enrollment in a UCI Ph.D. program and at least one introduction qualitative course.

Restriction: Graduate students only.

NUR SCI 262. Foundations of Professional Nursing Practice. 4 Units.

Focuses on the development of skills in therapeutic communication, interviewing, functional assessment across the lifespan, the art and science of human care, and clinical judgment. Faculty-facilitated, participatory peer group, and self-learning laboratory activities are included.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

NUR SCI 264A. Applied Pharmacology I. 2 Units.

Principles of pharmacology applied to intervention in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education included. Physical, psychological, social, and cultural factors affecting drug administration.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 114A.

NUR SCI 264B. Applied Pharmacology II. 2 Units.

Principles of pharmacology applied to intervention in pathophysiologic states across the life span. Discussion of the major drug groups with implications for monitoring, drug administration, toxicity, and patient education included. Physical, psychological, social, and cultural factors affecting drug administration.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 114B.

NUR SCI 268A. Pathophysiology I. 2 Units.

Focuses on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Content includes disease processes, linkage of relevant physiology to disease states, and factors that influence epidemiology and pathophysiology.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 118A.

NUR SCI 268B. Pathophysiology II. 2 Units.

Focuses on pathologic alterations in physiologic processes in cells, tissues, organs, and systems across the life span. Content includes disease processes, linkage of relevant physiology to disease states, and factors that influence epidemiology and pathophysiology.

Prerequisite: NUR SCI 268A. NUR SCI 268A with a grade of B- or better

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 118B.

NUR SCI 270. Primary Care Pediatrics. 2 Units.

Assessment and management of acute or episodic problems affecting pediatric patients and their families. Diagnostics, pharmacology, pathophysiology, and therapeutics are integrated.

Prerequisite: NUR SCI 210 and NUR SCI 230. NUR SCI 210 with a grade of B or better. NUR SCI 230 with a grade of B or better

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 271. Community-Based Health Care . 6 Units.

Epidemiology, primary health care promotion, and disease prevention applied to nursing care of individuals, families, groups, and communities. Includes sociocultural, political, economic, and environmental influences. Concepts and methods of assessing populations and communities incorporated in concurrent practicum.

Corequisite: NUR SCI 275 and NUR SCI 284

Prerequisite: NUR SCI 215 and NUR SCI 274 and NUR SCI 276. NUR SCI 215 with a grade of B or better. NUR SCI 274 with a grade of B or better.

NUR SCI 276 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 171.

NUR SCI 272. Pediatrics: Care of Children and Families. 6 Units.

Provides didactic and clinical experiences in nursing management of infants, children, and adolescents with acute, chronic, and emergency illnesses with an emphasis on social, cultural, and developmental influences.

Corequisite: NUR SCI 200 and NUR SCI 273

Prerequisite: NUR SCI 201 and NUR SCI 221B and NUR SCI 228. NUR SCI 201 with a grade of B or better. NUR SCI 221B with a grade of B or better.

NUR SCI 228 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 172.

NUR SCI 273. Maternity and Women's Health Care. 7 Units.

Provides didactic and clinical experiences in nursing management of women's wellness across the lifespan, the childbirth process, and newborn care. Incorporates concepts of family-centered care, teamwork and collaboration, patient safety, quality improvement and informatics, utilizing an evidence-based practice approach.

Corequisite: NUR SCI 200 and NUR SCI 272

Prerequisite: NUR SCI 201 and NUR SCI 221B and NUR SCI 228. NUR SCI 201 with a grade of B or better. NUR SCI 221B with a grade of B or better.

NUR SCI 228 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 173.

NUR SCI 274. Critical and Specialty Health Care. 6 Units.

Focuses on the delivery of patient-centered care and collaborative management of individuals with actual or potential life-threatening alterations in health status. Practicum in critical care units emphasizes teamwork, collaboration, informatics, evidence-based practice, safety, and quality improvement in safe care delivery.

Corequisite: NUR SCI 215 and NUR SCI 276

Prerequisite: NUR SCI 200 and NUR SCI 272 and NUR SCI 273. NUR SCI 200 with a grade of B or better. NUR SCI 272 with a grade of B or better.

NUR SCI 273 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 174.

NUR SCI 275. Clinical Preceptorship. 4 Units.

Hybrid clinical course facilitated by nursing faculty and clinicians focusing on in-depth clinical nursing practice and preparation for transition to independent practice. Topics covering NCLEX preparation, BRN application, and professional transition activities are discussed.

Corequisite: NUR SCI 271 and NUR SCI 284

Prerequisite: NUR SCI 215 and NUR SCI 274 and NUR SCI 276. NUR SCI 215 with a grade of B or better. NUR SCI 274 with a grade of B or better.

NUR SCI 276 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 175.

NUR SCI 276. Leadership and Management in Health Care. 4 Units.

Focuses on the role of the professional nurse as leader and manager of a health team. Principles, concepts, and theories related to organizations, management, leadership, change, decision-making, and group process are applied to the delivery of health care.

Corequisite: NUR SCI 215 and NUR SCI 274

Prerequisite: NUR SCI 200 and NUR SCI 272 and NUR SCI 273. NUR SCI 200 with a grade of B or better. NUR SCI 272 with a grade of B or better.

NUR SCI 273 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

Concurrent with NUR SCI 176.

NUR SCI 277. Implementation Science. 4 Units.

Focuses on dissemination and implementation (D&I) science. Emphasizes the types of questions D&I research seeks to answer, commonly used models and frameworks, methods employed, and outcomes examined.

Same as PSCI 277.

Restriction: Graduate students only.

NUR SCI 279A. Frameworks for the Advanced Practice Registered Nursing Role: Nurse Practitioner . 2 Units.

Orientation to the scope and standards of advanced practice registered nursing pertinent to the APRN role. Principles of jurisprudence, ethics, and advocacy will be introduced along with conceptual frameworks for advanced nursing practice.

NUR SCI 281. Professional Issues in Nursing . 3 Units.

Provides an orientation to the scope and standards of professional nursing practice for master's students. The social, political, and economic environments affecting health care delivery systems and the ethics of professional nursing practice are analyzed.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

NUR SCI 282. Compassionate Care with Underserved Populations. 2 Units.

Addresses theory/research on health risk factors (e.g., psychiatric illness, sociocultural and economic characteristics) that impact patient health and well-being across the lifespan. Emphasis is on cultural awareness, lifestyle modification, community resources, and communication/coping strategies to promote well-being.

Repeatability: May be taken for credit 2 times.

Restriction: Graduate students only.

NUR SCI 283. Primary Care Procedures. 2 Units.

Introduces the theoretical basis for common procedures performed in primary care clinical practice. Focus includes EKG interpretation, x-ray interpretation, minor surgery, and orthopaedic procedures.

Prerequisite: NUR SCI 245. NUR SCI 245 with a grade of B or better

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 284. Scholarly Concentration. 3 Units.

Focuses on analysis and use of research to provide the evidence-base nursing practice in an area of interest. Students critique, synthesize, and analyze a body of clinical and behavioral research evidence.

Prerequisite: NUR SCI 200. NUR SCI 200 with a grade of B or better

Restriction: Graduate students only. Nursing Science, Community and Population Health Nursing Majors only.

NUR SCI 285. DNP APRN Practicum I. 2 Units.

Clinical application of theory and research related to the advanced assessment and health promotion of patients across the lifespan.

Prerequisite: NUR SCI 210 and NUR SCI 230 and (NUR SCI 230L or NUR SCI 231L). NUR SCI 210 with a grade of B or better. NUR SCI 230 with a grade of B or better. NUR SCI 230L with a grade of B or better.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 286. DNP APRN Practicum II. 2 Units.

Clinical field study applying theory, research, and developing clinical skills related to the provision of care to patients and their families in increasingly complex clinical situations.

Prerequisite: NUR SCI 285. NUR SCI 285 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 287. DNP APRN Practicum III. 6 Units.

Clinical application of theory and research through clinical experiences in selected primary care settings designed to provide students with competencies in the assessment, diagnosis, management, and education/counseling in selected populations.

Prerequisite: NUR SCI 286. NUR SCI 286 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 288. DNP APRN Practicum IV. 7 Units.

Continued clinical application of theory and research through clinical experiences in selected primary care settings designed to provide students with competencies in the assessment, diagnosis, management, and education/counseling in selected populations.

Prerequisite: NUR SCI 287. NUR SCI 287 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 289. DNP APRN Practicum V. 8 Units.

Culminating clinical experience serves as a transition from the student role to that of the advanced practice nurse.

Prerequisite: NUR SCI 288. NUR SCI 288 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 290. DNP APRN Practicum VI. 4 Units.

Through continued clinical experience, students demonstrate increased responsibility and accountability for performance as an advanced practice nurse and clinical scholar, synthesizing knowledge of pathophysiology and disease management, evidence-based guidelines, anticipatory guidance, models of provider-patient communication, and provision of educational resources.

Prerequisite: NUR SCI 289. NUR SCI 289 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 291. DNP Practicum I. 4-9 Units.

Implementation and evaluation of an evidence-based, DNP project in an area of advanced practice in partnership with a selected agency or organization that solves a practice problem or improves population health, educational, or performance outcomes.

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only.

NUR SCI 292. DNP Practicum II. 5-11 Units.

Implementation and evaluation of an evidence-based, DNP project in an area of advanced practice in partnership with a selected agency or organization that solves a practice problem or improves population health, educational, or performance outcomes.

Prerequisite: NUR SCI 291. NUR SCI 291 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 293. DNP Practicum III. 4-9 Units.

Implementation and evaluation of an evidence-based, DNP project in an area of advanced practice in partnership with a selected agency or organization that solves a practice problem or improves population health, educational, or performance outcomes.

Prerequisite: NUR SCI 292. NUR SCI 292 with a grade of B or better

Grading Option: Satisfactory/unsatisfactory only.

Restriction: Graduate students only. Consent of instructor required to enroll.

NUR SCI 294. Directed Study in Vulnerable Populations. 1-4 Units.

Independent study that focuses on individually designed clinical learning experiences and goals within a selected vulnerable population, such as the homeless, veterans, minority groups, etc. Students work in a clinical setting addressing health care needs of the vulnerable population(s).

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be taken for credit 2 times.

Restriction: Nursing Science, Community and Population Health Nursing Majors only.

NUR SCI 296. Doctoral Dissertation Reading and Writing. 4-12 Units.

Dissertation research with Nursing Sciences faculty.

Prerequisite: Advancement to candidacy.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

NUR SCI 298. Directed Studies in Nursing Science. 1-12 Units.

Directed study with Nursing Science faculty.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

NUR SCI 299. Independent Study in Nursing Science. 1-12 Units.

Independent research with Nursing Science faculty.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

NUR SCI 399. University Teaching. 4 Units.

Limited to Teaching Assistants.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.