NURS 201. Concepts of Professional Nursing. 2 Hours.
Semester course; 2 lecture hours. 2 credits (2 credits lecture).
Prerequisite: admission to the School of Nursing. Provides a foundation for all clinical nursing courses. Content focuses on professionalism, professional nursing values and health care delivery. The core competencies identified by the Institute of Medicine for health care professionals are introduced as critical components of professional nursing practice, and selected concepts related to these core competencies are emphasized. Course activities are structured to establish effective professional behaviors and learning strategies useful across one's professional career.

NURS 202. Technologies of Nursing Practice. 6 Hours.
Semester course; 3 lecture and 90 clinical/laboratory hours. (3 credits lecture and 3 credits clinical/laboratory). 6 credits. Prerequisite: admission to the School of Nursing. This course introduces the student to the study and application of skills and interventions basic to nursing practice. Content focuses on the development of cognitive, psychomotor, affective, interpersonal and communication skills to become effective members of the collaborative health care team. Students will learn how the concepts of nursing process and evidence-based clinical decision-making are integrated into practice. Opportunities are provided for practice and demonstration of selected skills in the laboratory and in clinical settings. This course emphasizes techniques for the safe acquisition and management of patient information.

NURS 261. Health Assessment for Nursing Practice. 3 Hours.
Semester course; 2 lecture and 30 clinical/lab hours. 3 credits (2 credits lecture and 1 credit clinical/lab). Prerequisite: PHIS 206. Pre- or corequisite: NURS 201. Enrollment requires admission to the School of Nursing. This course builds on the biopsychosocial sciences and focuses on development of knowledge, skills and techniques necessary for history-taking and physical examination in adults. Students are introduced to the nursing process and diagnostic reasoning skills are developed through analysis and documentation of assessment data. A laboratory experience provides opportunities for students to integrate communication and problem-solving skills with the health assessment process. The course focuses on the healthy adult patient and emphasizes the diversity of patient populations in health care settings.

NURS 301. Nursing Informatics. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the School of Nursing. This course focuses on data management and use of information and technology to communicate effectively, provide safe and effective patient care and use research and clinical evidence to inform nursing practice decisions. The course emphasizes information literacy and its application to nursing practice and effective health care delivery. Course delivered online.

NURS 307. Foundations of Professional Nursing I. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the School of Nursing. Corequisite: NURS 301. This course explores historical and contemporary trends influencing professional nursing practice within the U.S. health care system. The course focuses on research within the context of nursing's development as a profession and discipline and within the context of evidence-based practice. The research process and analysis of research studies are emphasized. Course delivered online.
NURS 355. Psychiatric-Mental Health Nursing. 5 Hours.
Semester course; 3 lecture and 60 clinical hours. 5 credits (3 credits lecture and 2 credits clinical laboratory). Prerequisites: NURS 201, NURS 202 and NURS 261. All prerequisites must be completed with a minimum grade of C. Examines theoretical, empirical and practical knowledge applied to the prevention and treatment of common psychiatric and mental health conditions encountered in basic nursing practice. Provides students with an integrative perspective from which to incorporate various frameworks of knowledge into practice. Provides didactic knowledge and clinical learning experiences to facilitate students' understanding of actual and potential psychiatric illnesses and mental health problems in individuals, families and communities.

NURS 365. Pathophysiology and Pharmacology I. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). Prerequisites: anatomy, physiology and microbiology; BIOL 205, PHIS 206, BIOL 209 and admission to the School of Nursing. Introduces general and foundational principles in pathophysiology and pharmacology. Examines pathophysiologival mechanisms selected diseases, syndromes and/or conditions and integrates related pharmacotherapeutics. Establishes a biophysiological basis for understanding relevant clinical assessments, clinical manifestations and disease trajectories. Provides a foundation for establishing physiological priorities for nursing care.

NURS 366. Pathophysiology and Pharmacology II. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 lecture credits). Prerequisite: NURS 365 completed with a minimum grade of C. Examines pathophysiological mechanisms in selected human systems diseases, syndromes and/or conditions and integrates related pharmacotherapeutics. Establishes a biophysiological basis for understanding relevant clinical assessments, clinical manifestations and disease trajectories. Provides a foundation for establishing physiological priorities for nursing care.

NURS 371. Evidence-based Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: STAT 210, NURS 201, NURS 202. All prerequisites must be completed with a minimum grade of C. This overview course focuses on the knowledge and skills required to enact evidence-based practice over one's professional life. Students will examine the relevance of nursing research to evidence-based practice as they review important research concepts and identify factors affecting utilization of evidence in practice. The course formally introduces a model for evidence-based practice with an emphasis on the components of searching for, appraising and synthesizing best evidence.

NURS 396. VCU Health Nursing Internship. 1 Hour.
Semester course; 1 clinical/lab hour (120 hours in clinic/lab). 1 credit (1 credit clinical/lab). May be repeated. Prerequisites: NURS 201, NURS 202 and NURS 261, each with a minimum grade of C. VCU Health may require additional prerequisites. Provides supervised clinical experience in selected VCU Health clinical settings. Many of these settings are not available in traditional curriculum. Introduces students to the work life of a nurse.

NURS 397. International Comparison of Nursing Education and Clinical Care. 1 Hour.
Semester course; 30 clinical hours. 1 credit (1 credit clinical/lab). Enrollment restricted to students in the nursing program of the University of Cordoba or VCU. This course focuses on a comparison of the nature of nursing in two countries: the United States and Spain. Specifically, the course focuses on comparing and contrasting the health care systems and examining the nursing education systems and nursing student experiences in Spain and the U.S. Students from the University of Cordoba will engage in clinical simulations designed to expose them to the high fidelity simulators used in U.S. schools. Additionally, students from both schools will engage in guided observation of nursing care provided to patients in acute care settings and citizens within community-based settings.

NURS 403. Evidence-based Practice in Health Care. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 308 with a minimum grade of C. This course formally introduces models for evidence-based practice, examines hierarchies of evidence, reviews change theories useful to initiate EBP and identifies individual and organizational resources needed for EBP. Emphasis is on developing skills in retrieving and appraising literature relevant to clinical problems, understanding the research process and critiquing evidence from research publications and other sources to inform evidence-based nursing practice. Course delivered online.

NURS 406. Interprofessional Collaborative Practice. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Prerequisite: NURS 308 with a minimum grade of C. Explores the necessity for interprofessionalism in the contemporary health care environment. Core competencies and best practices for interprofessional collaborative practice are emphasized. Participation in virtual team activities provides students with opportunities to apply interprofessional knowledge, skills and attitudes that improve practice and impact patient care outcome. Course delivered online.

NURS 408. Ethics, Law and Public Policy: Application to Nursing Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 308 with a minimum grade of C. This course examines ethics, law and public policy that influence nursing practice and the nature and function of the health care system. The emphasis of the course will be on the role of the professional nurse as advocate for patients, families, communities and the nursing profession, as well as an advocate for changes in the health care system as needed. Course delivered online.

NURS 409. Population Health: Application to Nursing Practice. 2 Hours.
Semester course; 60 clinical hours. 2 credits (2 credits clinical/lab). Prerequisites: NURS 308 and NURS 309, both with minimum grades of C. This course provides opportunity to apply core concepts of population health in a community within the framework of the nursing process. Epidemiological and population-level data will be used to develop and/or guide interventions in the management of care. The course emphasizes evidence-based approaches to achieving sustainable population health outcomes. Course delivered online.
NURS 416. Community Health Nursing. 5 Hours.
Semester course; 3 lecture and 60 clinical hours. 5 credits (3 credits lecture and 2 credits clinical laboratory). Prerequisites: NURS 325, NURS 335, NURS 345, NURS 355, NURS 365, NURS 366 and NURS 371, all completed with a minimum grade of C. Focuses on development of knowledge and skills essential for care of communities and populations. Explores theory and evidence relevant to the assessment, planning, implementation and evaluation of communities and populations. Incorporates epidemiological principles to population-focused nursing and emphasizes the study and application of community health nursing roles for health promotion and disease prevention. Evaluates the impact of health policy on the public's health. Designs an evidence-based service-learning project to address the health care needs of at-risk populations.

NURS 425. Nursing of Adults II. 6 Hours.
Semester course; 3 lecture and 90 clinical hours. 6 credits (3 credits lecture and 3 credits clinical laboratory). Prerequisites: NURS 325, NURS 335, NURS 345, NURS 355, NURS 365, NURS 366 and NURS 371. All prerequisites must be completed with a minimum grade of C. Focuses on the patient in acute phases of physical illnesses and with complicated multisystem health problems. Provides theoretical and evidence-based foundations for nursing management and related therapeutic regimens. Focuses on the development and application of clinical decision-making and an evidence-based model in the provision of care to acutely ill adults in a variety of settings.

NURS 462. Advanced Pathophysiological Concepts: Application to Patient Care. 3 Hours.
Semester; 3 lecture hours. 3 credits. Prerequisites: NURS 308 and NURS 403, both with minimum grades of C. This course expands on basic knowledge of normal physiology and common pathophysiologic conditions across the lifespan. The course focuses on advanced knowledge of pathophysiology in relation to complex health care conditions. Integration of appropriate assessment skills and evidence-based pharmacologic and non-pharmacologic interventions are highlighted. The nurse's role in anticipating complications and evaluating clinical outcomes is emphasized. Course delivered online.

NURS 477. Leadership and Management in Health Care. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisites: NURS 308, NURS 309 and NURS 403, all with minimum grades of C; corequisite: NURS 406. This course examines principles of leadership and management that facilitate coordination and implementation of safe, quality-oriented and ethical patient care. The course emphasizes development of leadership competencies within contexts of the nursing community and interprofessional team in a variety of settings within the contemporary health care delivery system. Course delivered online.

NURS 478. Leadership and Management in Health Care: Theory and Application. 5 Hours.
Semester course; 3 lecture and 60 clinical/laboratory hours (3 credits lecture and 2 credits clinical/laboratory). 5 credits. Prerequisites: NURS 325, NURS 335, NURS 345, NURS 355, NURS 365, NURS 366 and NURS 371, all completed with a minimum grade of C. Integrates principles of leadership and management to prepare students for management, coordination and implementation of safe and ethical patient care in contemporary health care delivery systems. Based on an understanding of nursing's development as a profession, advances enactment of professionalism. Precepted clinical experiences provide opportunities to apply leadership and management principles to nursing practice in a variety of settings and specialty areas.

NURS 488. Clinical and Management Decision-making. 3 Hours.
Semester course; 1 lecture and 2 laboratory hours (60 clinical/lab contact hours; delivered online). 3 credits (1 credit lecture, 2 credits clinical/lab). Prerequisites: NURS 406, NURS 462 and NURS 477, all with minimum grades of C. This course is designed as the culminating experience for the R.N.-B.S. completion program. The course provides opportunities to evaluate outcomes of baccalaureate education within the context of the clinical practice setting, to apply leadership principles and change theories to clinical and management decision-making, to employ concepts of quality and safety, and to use quality improvement processes in the health care setting.

NURS 491. Special Topics Course. 1-6 Hours.
Semester course; 1-6 lecture hours. 1-6 credits (1-6 credits lecture). Prerequisites: admission to the School of Nursing and permission of instructor. An in-depth exploration of specific topics in nursing theory and practice.

NURS 492. Elective Study. 1-5 Hours.
1-5 credits. Prerequisite: admission to the School of Nursing. Independent study projects planned to meet the learning objectives of the student.

NURS 496. Senior Synthesis. 6 Hours.
Semester course; 2 lecture and 120 clinical/lab hours. Honors section only: 2 lecture, 1 seminar and 120 clinical/lab hours. 6 credits (2 credits lecture and 4 credits clinical/lab). Honors section: 7 credits (2 credits lecture, 1 credit seminar [2 contact hours] and 4 credits clinical/lab). Prerequisites: NURS 325, NURS 335, NURS 345, NURS 355, NURS 365, NURS 366, NURS 371, NURS 425, IPEC 501 and IPEC 502. Honors section prerequisite: NURS 512. All prerequisites must be completed with a minimum grade of C. This course is designed as a culminating experience that meets the criteria of the third tier of the VCU Core Curriculum. It prepares students for successful transition into professional practice; thus it requires higher-level cognitive processes that include synthesis of knowledge, evidence and skills from all previous course work and clinical experiences. The course requires that the student consistently enact professional practice, demonstrate competency in standards of care, application of evidence, professionalism and safe and legal practice. This course is taken during the last semester of the nursing program.

NURS 501. Advanced Professionalization I. 1 Hour.
Semester course delivered online; 1 lecture hour. 1 credit. Prerequisite: admission to the graduate program in nursing. Focuses on socialization to the roles and responsibilities related to advanced nursing preparation. Introduces the history, competencies and roles of advanced practice nursing with an emphasis on role acquisition. Addresses trends and issues which shape advanced practice nursing.

NURS 502. Advanced Nursing Practice: Pharmacotherapeutics. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the graduate program in nursing. Develops the requisite knowledge of pharmacotherapeutics necessary for the safe pharmacological management of common patient problems by the advanced practice nurse.
NURS 503. Ethics, Advanced Nursing Practice and the Health Care Environment. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 501. Grounded in the disciplinary perspective and heritage of nursing, emphasizes analysis of ethical concepts foundational to advanced nursing practice while considering diverse perspectives of the patient, family, health care team and organizational system. Focuses on applying ethical decision-making frameworks to analyze ethical dilemmas and negotiating individual and team-based values. Addresses development of effective communication and leadership strategies for promoting ethical health care delivery and managing ethical conflicts.

NURS 504. Advanced Pathophysiology. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Enrollment restricted to students admitted to the nursing program. Focuses on the biological and pathophysiological foundations of health problems across the lifespan. Uses biologic changes underlying selected health risks and health problems as a framework for critically appraising health assessment data and for understanding advanced nursing therapeutic strategies.

NURS 507. Health Promotion and Disease Prevention Across the Lifespan. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Pre- or corequisite: NURS 504. Focuses on advanced nursing assessment and the design and delivery of evidence-based, culturally relevant health promotion and disease prevention strategies for individuals across the lifespan. Applies theories, concepts and research findings related to health promotion, health protection and disease prevention as a basis for clinical decision-making with child, adolescent and adult patients and their families within a variety of care settings.

NURS 508. Policy, Processes and Systems for Advanced Nursing Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the nursing program. Explores various influences on the structure and financing of health care, advanced nursing practice and health outcomes from a macro and micro perspective of the current health care system. Addresses the policy-making process at various levels of government and within institutions, policies affecting current and future nursing care delivery systems and nursing's role in policy advocacy to improve the quality of health care delivery. Using policy, processes and systems-level strategies, including quality improvement and high reliability organizational theory, students will be able to articulate the methods, performance measures, culture of safety principles and quality standards necessary for effective leadership as a change agent in the current health care system.

NURS 511. Health Assessment for Advanced Nursing Practice. 3 Hours.
Semester course; 2 lecture and 45 clinical/laboratory hours. 3 credits (2 credits lecture and 1 credit clinical/laboratory). Prerequisite: admission to the nursing program. Provides the framework for holistic, culturally relevant assessment of individuals. Focuses on advancing students' knowledge and assessment in health history, risk appraisal, health promotion, psychosocial, developmental and functional assessment and physical examination techniques. Emphasizes the application of diagnostic reasoning skills in assessing deviations from normal in selected content in specialty areas. Includes supervised experiences with advanced clinical assessment skills.

NURS 512. Evidence-Based Advanced Nursing Practice. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the graduate program in nursing or Honors College. Grounded in the disciplinary perspective of nursing, focuses on appraisal of research evidence to guide advanced nursing practice. Addresses the use of clinical and epidemiological data to identify clinical problems, health risks and organizational issues that impact health outcomes of individuals, families and communities. Reviews application of criteria for evaluating research studies using foundational knowledge of major research designs and basic statistics. Emphasizes appraisal and synthesis of scientific literature to design evidence-based practice strategies and outcome measures in the context of a selected clinical problem, population health risk or organizational issue. Reviews the process of research translation and ethical conduct of research.

NURS 591. Special Topics. 1-3 Hours.
Semester course; 1-3 credits. Prerequisite: admission to the graduate program in nursing. Explores specific topics in nursing theory and practice.

NURS 592. Directed Study in Nursing. 1-3 Hours.
Semester course; variable hours. 1-3 credits. Prerequisite: admission to the graduate program in nursing. Independent study in a specific area of nursing developed under the supervision of a member of the graduate faculty.

NURS 594. Directed Study: Nursing Clinical Practicum. 1-6 Hours.
Semester course; 45-270 clinical/lab hours. 1-6 credits (1-6 clinical/lab credits). Prerequisite: permission of instructor. Independent study in specific practicum area of nursing developed under the supervision of a faculty member. Graded as pass/fail.

NURS 601. Advanced Professionalization II. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Prerequisite: NURS 501. Designed to prepare students to assume an advanced practice nursing role after graduation. Focuses on role development in advanced practice nursing, marketing oneself as an advanced practice nurse, and regulatory and economic policies that affect advanced practice nursing in today's health care system. Presents strategies to evaluate outcomes attributable to APN practice.

NURS 605. Statistical Methods for Quality Improvement. 3 Hours.
Semester course; 3 lecture hours (delivered online). 3 credits (3 credits lecture). Enrollment restricted to students admitted to a graduate program. This course focuses on common analytic approaches in practice change projects, including correlation, chi-square analysis, independent and paired t tests, analysis of variance, and logistic and multiple regression. Selection of the most relevant analytic strategy to determine clinical significance of a quality improvement initiative will be emphasized. The application of statistical process control methods to health care quality improvement projects will be emphasized. The student will apply principles of statistical analysis to a dataset using statistical software to identify characteristics of participants and outcomes.

NURS 606. Evaluating Evidence to Improve Health Outcomes. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). Provides essential skills for using research evidence to support and promote practice change. Collaboration between nursing and other disciplines in problem identification will be explored. Ethical dimensions of quality improvement research and research evidence will be reviewed. Students will formulate a clinical question, search for supporting evidence, apply appraisal principles to evaluate the evidence and derive practice-specific recommendations for implementation.
NURS 607. Epidemiology and Population Health. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture).
Prerequisite: NURS 605. Integrates principles of epidemiology, evidence-based clinical prevention, health screening, behavioral modification, disease modification and disease management of populations and quality metrics. Students will assess population health models and frameworks to address a multilevel perspective of the health status of vulnerable populations and sources of health inequalities. Cultural perspectives will be emphasized at a regional, national and global level.

NURS 608. Quality Improvement in Practice. 3 Hours.
Semester course; 3 lecture hours (delivered online). 3 credits (3 credits lecture). Enrollment restricted to students admitted to a graduate program. This course prepares the student for proficiency in the development of quality improvement initiatives for sustainable practice change. The student will assess evidence as it relates to cost, quality and health outcomes (individual and aggregate) within the context of current regional and national health care trends and emerging issues. Emphasis will be on the methods and tools utilized in performance improvement and patient safety. The student will develop a quality or safety initiative using a systems approach.

NURS 609. Health Care Delivery and Reimbursement Systems for Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course summarizes contemporary issues in health care delivery, evolving models of health care delivery systems and reimbursement. The focus is on current policies and systemic factors that affect the delivery of health care to the U.S. population and their potential impact on future health care delivery. The course presents factors affecting the evolution of the U.S. health care system and health care provider roles with a focus on the nurse and advanced practice. Issues are presented in context of patient-centered care and population-level aims for quality outcomes.

NURS 610. Health Information and Emerging Health Care Technologies. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). Enrollment restricted to students admitted to a graduate program. Health informatics will be explored as an integral component of health care delivery. Focuses on building understanding of effective use and evaluation of health information technologies. Particular emphasis will be on informatics’ role in health care decision-making, access to care, patient safety and quality of care. Also emphasizes the use of health informatics as a component of patient care and for the improvement of quality and safety outcomes over time, leading to sustainable change. Additional focus on current and emerging technologies.

NURS 611. Primary Care Advanced Practice Clinical Procedures. 1 Hour.
Semester course; 7.5 lecture and 22.5 laboratory (contact) hours. 1 credit. Prerequisites: NURS 504 and 511. Provides the foundation for acquiring a beginning level of competency in a variety of common primary care advanced clinical practice skills and procedures. Emphasizes correct technique and includes supervised experiences.

NURS 612. Acute Care Advanced Practice Clinical Procedures. 1 Hour.
Semester course; 7.5 lecture and 22.5 laboratory (contact) hours. 1 credit. Prerequisites: NURS 504 and 511. Provides the foundation for acquiring a beginning level of competency in a variety of common acute care advanced clinical practice skills and procedures. Emphasizes correct technique and includes supervised experiences.

NURS 613. Organizational Behavior and Leadership for Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Corequisite: NURS 668. This course introduces students to organizational behavior as it relates to leadership theory based on classic and contemporary readings in organizational behavior. Students will engage in self-evaluative processes to assess and enhance their leadership capabilities in relation to elements of sound leadership principles. The course will examine topics in organizational behavior that relate to the nurse leader role in health care delivery. Management principles are outlined, discussed and put in context to give a realistic focus to issues in leadership and organizational behavior. The course uses case method, simulation, discussion, self-assessment instruments, written exercises and audiovisual aids to illuminate leadership and managerial practices in relation to organizational behavior.

NURS 614. Organizational Systems and Leadership for Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Enrollment restricted to students admitted to the graduate program in nursing. This course introduces a systems approach to health care organizational operations leadership and management. Students will gain an understanding of how nurse leaders working with the health care team organize and use structures and analytical approaches to assess and report on the efficiency and effectiveness of work processes that affect patient care, satisfaction and health outcomes. Students will gain skills in operations management by analyzing work processes, patient flow, project management, and the supply chain and customer service.

NURS 615. Diagnosis and Management in Adult-Gerontology Primary Care I. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Pre- or corequisites: NURS 501, NURS 504, NURS 507, NURS 511. Provides content on the primary care management of health and illness changes throughout the adult lifespan. This course focuses on increasing the nurse practitioner student’s knowledge and clinical decision-making skills in order to provide health screening, identify health promotion needs, and accurately diagnose and manage common health conditions across the adult lifespan. Emphasis is placed on developmental, prevention, pathophysiological, pharmacological and critical-thinking skills in the management of common complex and multisystem disorders.

NURS 616. Diagnosis and Management in Adult-Gerontology Primary Care II. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 615. This course is a continuation of NURS 615. The course includes prevention, pathophysiological, pharmacological and critical-thinking skills in maximizing health with common and complex health problems. Emphasis is placed on increasing the nurse practitioner student’s knowledge and clinical decision-making skills in order to provide health screening, identify health promotion needs, accurately diagnose and provide women’s-and adult-specific care and psychobehavioral care across the adult lifespan, particularly in the context of common complex and multisystem disorders.
NURS 617. Advanced Gerontology Primary Care Across the Care Continuum. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisite: NURS 616. Students will further examine and integrate physiological, psychological and sociocultural processes associated with normal aging. Relevant theories, concepts and research findings from the behavioral, social and biological sciences are analyzed as a basis for advanced nursing practice with older adults and their families. Emphasis is placed on enhancing the individual's health within the context of their functional capabilities, social support networks and environment. Important geriatric care models for effective practice with older adults across the care continuum – coordinated care, transitions of care and complex care management – are reviewed.

NURS 618. Diagnosis and Management in Adult-Gerontology Acute Care I. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Pre- or corequisites: NURS 501, NURS 504, NURS 507, NURS 511. Provides content on the management of adult and geriatric patients and populations who are physiologically unstable, technologically dependent and/or highly vulnerable to complications. The focus of this course is on increasing students' acute care knowledge and decision-making skills in order to accurately assess, diagnose and manage complex acute, critical, and chronically ill or injured adult and geriatric patients.

NURS 619. Diagnosis and Management in Adult-Gerontology Acute Care II. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 618. This course is a continuation of NURS 618. The course provides content on the management of adult and geriatric patients who are physiologically unstable, technologically dependent and/or highly vulnerable to complications. The focus of this course is on increasing students' acute care management knowledge and decision-making skills in order to stabilize the patient's condition, prevent complications, restore maximum health and provide palliative care.

NURS 620. Gero-pharmacology. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Prerequisite: NURS 502. This course refines knowledge of pharmacotherapeutics needed by the advanced practice nurse for the safe pharmacological management of common patient problems in older adults. Emphasis is placed on the interprofessional team, including families and caregivers, as an essential component of care for older adults.

NURS 621. Leadership and Organizational Systems. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). Examines system leadership and change within the context of organizational culture. Models and strategies related to leadership, effective organizational processes, organizational change, strategic planning and interprofessional teamwork will be evaluated. Emphasizes development of skills in system assessment and system intervention design.

NURS 627. Foundational Perspectives of Family-centered Care. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Prerequisite: admission to the graduate program in nursing. This course is foundational to the family nurse practitioner curriculum and provides the theoretical foundation and context for the FNP's role in the care of families. The course will emphasize analysis of theories and research concerning families. The effects of psychosocial, cultural, socioeconomic and spiritual variables on families at risk will be discussed. The effects of transitions and crises on the health/illness status of patients in the context of family will be explored. Culturally appropriate communication skills to facilitate family decision-making and foster positive behavioral change in the patient and caregiver will be analyzed. Students will examine their personal beliefs and family life experiences to inform their developing advanced practice role.

NURS 629. Diagnosis and Management in Family Primary Care I. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Enrollment restricted to students admitted to a graduate program in nursing. This course is designed to introduce the student to the role of the nurse practitioner as a provider of primary care across the lifespan. Concepts of advanced health assessment, pharmacology and pathophysiology are synthesized with a focus on diagnostic decision-making and interdisciplinary management of common acute and chronic health problems. Emphasis is placed on facilitating optimal health and function of patients from newborn through senescence. Strategies to enhance, maintain and restore health are emphasized, while promoting health-seeking behaviors and the impact on family-centered care.

NURS 630. Diagnosis And Management In Family Primary Care II. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisite: NURS 629. This course is a continuation of NURS 629. Concepts of health promotion and disease prevention, advanced health assessment, pharmacology, and pathophysiology are incorporated into the diagnosis and interdisciplinary management of common acute and chronic health problems. Emphasis is placed on the formation and evaluation of comprehensive evidence-based care with regard to the care of common complex and multisystem disorders. Strategies to enhance, maintain and restore health are emphasized. Health-seeking behaviors and the impact on family are stressed.

NURS 631. Primary Care of Select Populations. 2 Hours.
Semester course; 1 lecture and 45 clinical/lab hours. 2 credits (1 credit lecture and 1 credit clinical/lab). Prerequisites: NURS 629 and NURS 630. This course addresses the diagnosis and management of select primary care topics in women's health, pediatrics, gerontology and psychiatric-mental health. Laboratory experiences including simulation, standardized patients and objective structured clinical examinations will accompany didactic content delivery. Graded P/F.
NURS 635. Advanced Practice Psychiatric Mental Health Nursing Practicum I. 6 Hours.
Semester course; 270 clinical/lab hours. 6 credits (6 credits clinical/lab). Prerequisites: NURS 502, NURS 503, NURS 511 and NURS 657; corequisite: NURS 636. Focuses on the diagnosis and management of mental health problems and psychiatric disorders for individuals, families and groups across the lifespan through faculty supervised clinical experiences with a preceptor. Demonstrates ability to perform a comprehensive psychiatric evaluation while incorporating therapeutic communication skills. Provides opportunities to apply knowledge of standardized taxonomy systems and evidence-based screening guidelines to formulate a differential diagnosis. Requires students to develop plans of care incorporating evidence-based practice guidelines. Performance of clinical skills at a basic level is expected. Graded Pass/Fail.

NURS 636. Advanced Practice Psychiatric Mental Health Nursing Seminar. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 lecture credits). Corequisite: NURS 635. Prepares for and builds on practicum experience. Focuses on the management of both acute and chronic psychiatric disorders for individuals, families and groups across the lifespan. Examines the unique characteristics of selected populations diagnosed with mental health problems or psychiatric disorders and ways to address complex management needs through a case study approach. Provides opportunities for students to plan and discuss treatment plans while integrating health promotion and education strategies. Students are expected to apply knowledge of both psychotherapeutic and psychopharmacologic interventions. Focuses on synthesis of evidence to analyze clinical decision-making and formulate a patient-centered plan of care across the treatment trajectory.

NURS 637. Advanced Practice Psychiatric Mental Health Nursing Practicum II. 6 Hours.
Semester course; 270 clinical/lab hours. 6 credits (6 credits clinical/lab). Prerequisite: NURS 635. Builds on previous practicum experience. Focuses on the advanced management of mental health problems and psychiatric disorders for individuals, families and groups across the lifespan through faculty-supervised clinical experiences with a preceptor. Students will implement and evaluate the management of both common and complex mental health problems and psychiatric disorders. Provides opportunities for the synthesis, application and evaluation of knowledge needed to provide evidence-based psychiatric care. Focuses on strategies to lead the interprofessional health care team in quality improvement methods. Promotes the provision of high-quality, collaborative and ethical care. Performance of clinical skills at the advanced level is required. Graded as Pass/Fail.

NURS 638. Health Policy Leadership and Advocacy. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). Prerequisite: NURS 606. Emphasizes critical analysis of the political, organizational, economic, ethical, and quality and safety dimensions of health policy issues. Contextual factors such as social justice, health disparities, vulnerable populations, access to care, health care financing and the globalization of health care will be explored. Leadership skills in health policy advocacy will be refined throughout the course.

NURS 639. Health Informatics for Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. The course gives students a broad overview of health informatics in the context of the health care organization; discusses principles of informatics and information flows in nursing and health care using systems analysis techniques; and emphasizes understanding of how nurse leaders implement, manage and evaluate health care information and informatics projects. Information and communication technology system integration, data security, as well as ethical and regulatory issues, will be reviewed. Current topics and issues related to the use, retrieval, evaluation and dissemination of health care information will be discussed, as well as the role of informatics in decision-making.

NURS 643. Family Primary Care Practicum I. 6 Hours.
Semester course; 270 clinical/lab hours. 6 credits (6 credits clinical/lab). Prerequisites: NURS 629 and NURS 630; corequisite: NURS 644. This precepted practicum course is designed to provide opportunities for students to develop beginning competencies as a family nurse practitioner. Critical-thinking and diagnostic-reasoning skills will be developed. Skills of advanced health assessment and knowledge of the management of common health problems will be applied in the clinical setting. Students will order, conduct and interpret appropriate screening and diagnostic tests, generate differential diagnoses and, in conjunction with the preceptor, determine diagnosis and management plan. Students will demonstrate effective case presentations to preceptor and document appropriately. A minimum of 45 practicum hours (135 hours total) in women's health, geriatrics and pediatrics will be completed between the two practicum courses. Graded as pass/fail.

NURS 644. Family Primary Care Seminar. 1 Hour.
Semester course; 1 seminar hour (15 lecture hours). 1 credit. Corequisite: NURS 643. Seminars will emphasize skill development in the teaching-coaching function. A case-study approach will provide the basis for in-depth assessment and discussion of health and illness problems. Case analysis and discussion will enhance the student's ability to manage the health and illness status of patients and families over time. Graded as pass/fail.

NURS 645. Family Primary Care Practicum II. 6 Hours.
Semester course; 270 clinical/lab hours. 6 credits (6 credits clinical/lab). Prerequisites: NURS 643, NURS 644; corequisite: NURS 646. This practicum course serves as the culminating experience in the family nurse practitioner concentration focused on skill refinement with increasing responsibility in the delivery of primary care to families. Students will work with clinical preceptors to assimilate practice management skills pertaining to economics, reimbursement for services and time management. Primary care skills including prioritization, management and coordination of both routine and complex episodic and chronic illness problems and technology utilization are refined. Interdisciplinary collaborative practice skills are emphasized. Configuration of practicum hours will be based on results of individualized assessment and evaluation performed in NURS 644. A minimum of 45 practicum hours (135 hours total) in women's health, geriatrics and pediatrics will be completed between the two practicum courses. Graded P/F.
NURS 646. Family Primary Care Final Synthesis Seminar. 1 Hour.
Semester course; 1 seminar hour (15 lecture hours). 1 credit.
Prerequisites: NURS 643, NURS 644; corequisite: NURS 645. This seminar is designed to facilitate the student's ability to integrate theory, research and clinical practice. An in-depth analysis of the evaluative, consultative, systems leadership and advocacy functions of the nurse practitioner role within a professional, ethical and legal framework will be performed. Students will complete an evidence-based clinical project that demonstrates synthesis of knowledge, as well as written, oral and critical-thinking skills. Graded P/F.

NURS 651. Decision Analysis for Quality Outcomes Across Populations. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course focuses on managerial decision-making and planning. The main focus is to introduce widely used methods that aid in decision-making and planning, including intuitive approaches, quantitative methods (samples and probabilities, decision trees, tradeoff analysis) and applied approaches to evaluate problems as well as progress toward solutions (assessing risk, root cause analysis, gap analysis and benchmarking). Each method uses real-world illustrations. Students will have the opportunity to use applied approaches to pose solutions to problems faced by nurse managers and leaders.

NURS 652. Health Care Managerial Finance I: For Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course provides introductory business financial management training. The course describes opportunities for improving a health system's fiscal efficiencies and delivery by providing practical approaches to budgeting, financial analysis and the management of financial resources. The course provides instruction on the development and analysis of financial spreadsheets. Financial accounting principles are reviewed. Conceptual and real-world issues will be addressed using tools to analyze nursing and health care organizational performance, costs, budgets and variance.

NURS 653. Health Care Managerial Finance II: Economic Evaluation and Analysis. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 651 and NURS 652. This course presents an overview of the macro and micro economy as an influencing factor on health care delivery presented in the context of ethical considerations and techniques that enhance efficiency. The course covers various cost-effectiveness analysis tools that enhance the ability of decision-makers to assess efficiencies and effectiveness. The main goal for students is to understand the parameters for using these techniques and how they are applied in nursing as well as in interdisciplinary approaches in health care settings.

NURS 656. Diagnosis and Management of Psychiatric Disorders Across the Lifespan. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisite: NURS 657. Students will develop advanced practice psychiatric-mental health nursing knowledge related to the psychodiagnostic, psychopharmacologic and psychotherapeutic evaluation/treatment of psychiatric disorders across the lifespan. This course focuses on the neurobiological basis of psychiatric disorders and associated evidence-based treatments. Addresses knowledge needed for comprehensive and collaborative management of culturally diverse clients with psychiatric disorders in both acute and primary health care settings.

NURS 657. Advanced Practice Psychiatric Mental Health Nursing: Theory and Practice Across the Lifespan. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisite: NURS 504. Focuses on advanced psychiatric mental health nursing practice by integrating theoretical, clinical and research knowledge related to psychotherapeutic management of acute and chronic mental health problems and psychiatric disorders. Examines knowledge of theories and psychotherapeutic techniques for individuals, families and groups across the lifespan. Analyzes interprofessional practice as applicable to the psychiatric mental health setting.

NURS 662. Diagnosis and Management in Adult-Gerontology Critical Care. 4 Hours.
Semester course; 4 lecture hours. 4 credits. Prerequisites: NURS 618 and 619. Provides content on selected common health and illness changes encountered in adult-geriatric critical care settings. The focus of this course is on increasing students' knowledge about common problems seen in the adult critical care environment.

NURS 664. DNP Residency: Mentored Practicum. 1-6 Hours.
Semester course; 1-6 clinical/lab hours (45-270 clinical hours). 1-6 credits. May be repeated for a maximum total of 18 credits. Prerequisites: NURS 605 and NURS 608; 500 clinical practice hours. Mentored study that facilitates student demonstration of DNP competencies through documented learning experiences and implementation of the DNP project. Practice setting and focus of residency hours are individualized to student's specific area of interest. Residency activities will be mutually developed by the student and faculty adviser, culminating in a professional portfolio that demonstrates achievement of all course objectives by the completion of the 12 required residency credits. Graded as pass/fail.

NURS 665. DNP Project I: Proposal Development. 3 Hours.
Semester course; 3 lecture/seminar hours. 3 credits (3 lecture/seminar credits). Prerequisites: NURS 605, NURS 606, NURS 607 and NURS 608. Provides the student with the support and direction needed to develop a comprehensive DNP project proposal. The DNP project is designed to improve quality and/or safety patient outcomes. Students use evidence-based practice to design the DNP project that is focused in a specialized clinical area. Students work in collaboration with their faculty adviser and DNP project team.

NURS 666. Strategic and Change Management for Quality Outcomes for Nurse Leaders. 2 Hours.
Semester course; 2 lecture hours. 2 credits. Prerequisite: NURS 613. This course introduces strategic management principles, models and tools useful for implementing sustainable organizational change. Students will be able to align organizational and nursing-specific mission, vision and goals setting a strategic direction. Students gain applied practice in select strategic and change-management processes in real-world nursing contexts and discuss how these processes optimize or hinder quality patient care outcomes. Finally the course explores factors that facilitate sustaining a strategic direction and how sustainability builds markers of superior performance and quality.
NURS 667. DNP Project II: Project Implementation and Evaluation. 3 Hours.
Semester course; 3 lecture/seminar hours. 3 credits (3 lecture/seminar credits). May be repeated. Program culminates in the successful completion of a scholarly project designed by the student in collaboration with the faculty adviser and DNP project team. The DNP student will analyze and summarize findings and defend the DNP project. The final DNP product (criteria outlined in the DNP handbook) is a scholarly manuscript that provides evidence of the student's critical thinking and ability to translate research through problem identification, proposal development, implementation, and evaluation. Graded as pass/fail.

NURS 668. Human Resource and Customer Relationship Management for Nurse Leaders. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 508 and NURS 609. Corequisite: NURS 613. This course examines the role of human resource management in health care and nursing organizations in meeting the challenge of continually improving patient care services. Students will gain an understanding about strategies useful to empower, motivate, hire and retain nursing talent. The course discusses topics in HR management appropriate for nurse leaders and frontline managers such as nursing workforce training, competencies, performance appraisals, recruitment and retention, and progressive disciplinary approaches. HR concepts about workforce capabilities and employee satisfaction will be discussed in relation to their association with patient satisfaction and health care delivery outcomes.

NURS 669. Adult-Gerontology Acute Care Practicum II. 4 Hours.
Semester course; 180 clinical hours. 4 credits (4 credits clinical practicum). Prerequisite: NURS 678. Focuses on providing acute care management of adults-older adults with complex acute, critical and chronic health conditions. Particular emphasis will be placed on integrating health promotion, protection and disease-prevention interventions; safety principles; and risk-reduction strategies through faculty-supervised clinical experiences with a preceptor. Building on previous practicum experience, students guide and evaluate resuscitation, stabilization and rehabilitation interventions while integrating preventive strategies to reduce complications. Provides opportunities to develop and carry out the plan of care and incorporate evidence-based practice guidelines to improve patient outcomes. Performance at the intermediate level is expected. Graded pass/fail.

NURS 675. Adult-Gerontology Primary Care Practicum II. 4 Hours.
Semester course; 180 clinical hours. 4 credits (4 credits clinical practicum). Prerequisite: NURS 676. Focuses on primary care management of adults-older adults throughout the wellness-illness spectrum with particular attention on integrating health maintenance and risk-reduction interventions for patients with comorbidities through faculty-supervised clinical experiences with a preceptor. Building on previous practicum experience, students implement health screening, health promotion, health protection and risk-reduction strategies for adolescent-older adults within the context of their current health issues and comorbidities. Provides opportunities to develop and carry out the plan of care incorporating evidence-based practice guidelines to improve patient outcomes. Performance at an intermediate level is expected. Graded pass/fail.

NURS 676. Adult-Gerontology Primary Care Practicum I. 1-3 Hours.
Semester course; 45-135 clinical hours. 1-3 credits (1-3 credits clinical practicum). Prerequisite: NURS 511. Focuses on providing primary care management of adolescent-older adults across the wellness-illness continuum through faculty-supervised clinical experiences with a preceptor. Provides opportunities to focus on the differing and unique developmental, life stage needs that impact a patient’s care across the adult age spectrum and application of evidence-based strategies in directing health promotion, health protection, disease prevention and primary care management of injuries and disease. Students must demonstrate ability to synthesize theoretical, scientific and contemporary clinical knowledge for the assessment and management of both health and illness states and apply knowledge within the framework of different practice models and populations. Performance at a basic level is expected. Graded as pass/fail.

NURS 677. Adult-Gerontology Primary Care Practicum III. 5 Hours.
Semester course; 255 clinical hours. 5 credits (5 credits clinical practicum). Prerequisite: NURS 676. Focuses on advanced primary care management of adolescent-older adults with complex health issues and comorbidities through faculty-supervised clinical experiences with a preceptor. Building on previous practicum experience, students implement and evaluate health screening, health promotion, health protection, disease prevention, risk-reduction strategies and systems-based coordination in the management of adults-older adults with complex health conditions. Provides opportunities for leadership within the interprofessional health care team to direct quality improvement methods, implementation of evidence-based practice guidelines to address a clinical problem and evaluation of patient and systems-based outcomes. As the final practica course, performance at the advanced level is expected. Graded as pass/fail.

NURS 678. Adult-Gerontology Acute Care Practicum I. 1-3 Hours.
Semester course; 45-135 clinical hours. 1-3 credits (1-3 credits clinical practicum). Prerequisite: NURS 511. Focuses on providing acute care management of adolescent-older adults who are physiologically unstable, technologically dependent and highly vulnerable to complications through faculty-supervised clinical experiences with a preceptor. Provides opportunities to focus on the provision of a spectrum of care ranging from disease prevention to acute and critical care management. Students must synthesize theoretical, scientific and contemporary clinical knowledge for the assessment and management of both health and illness states and apply knowledge within the framework of different practice models and differing populations. Performance at a basic level is expected. Graded as pass/fail.

NURS 679. Adult-Gerontology Acute Care Practicum III. 5 Hours.
Semester course; 225 clinical hours. 5 credits (5 credits clinical practicum). Prerequisite: NURS 669. Focuses on advanced acute, critical and chronic management of adolescent-older adults who are physiologically unstable, technologically dependent and highly vulnerable to complications through faculty-supervised clinical experiences with a preceptor. Building on previous practicum experience, students integrate health screening, promotion, protection and disease-prevention interventions; safety principles; risk-reduction strategies; and systems-based coordination in the management of adults-older adults with complex acute, critical and chronic illnesses and illnesses throughout the trajectory of resuscitation, stabilization and rehabilitation. Provides opportunities for leadership within the interprofessional health care team to direct quality improvement methods, implementation of evidence-based practice guidelines to address a clinical problem and evaluation of patient and systems-based outcomes. As the final practica course, performance at the advanced level is expected. Graded as pass/fail.
NURS 691. Nursing Research Practicum. 3 Hours.
Semester course; 3 laboratory hours. 3 credits. Prerequisite: NURS 512. Participates in ongoing research. Implements research with faculty direction and supervision.

NURS 695. Managing for Performance and Health Care Outcomes. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 508 and NURS 512. This course synthesizes organizational systems approaches to design, identify, analyze and benchmark quality and safety initiatives in health care settings across the continuum. Students will gain an overview of how evidence drives decisions about and implementation of processes in organization performance improvement. Students will also apply principles in quality and safety project design to address a specific issue affecting patient care outcomes.

NURS 696. Practicum I: Comparative Health Care Delivery Systems for Nurse Leaders. 2 Hours.
Semester course; 90 clinical/lab hours. 2 credits. Prerequisites: NURS 609, NURS 613 and NURS 614. This practicum experience is designed to integrate theory with the reality of various organizational contexts impacting health care delivery systems, nursing systems and leadership. The overall purpose is to provide students with opportunities to compare how different systems influence nursing practice and nursing leadership. The practicum is designed with three separate units to give students opportunities to compare different health care settings, which may include local, regional, national and international contexts. Graded Pass/Fail.

NURS 697. Practicum II: Comparative Interdisciplinary Health Care Leadership Roles. 1 Hour.
Semester course; 45 clinical/lab hours. 1 credit. Prerequisite: NURS 696. In this course the student applies principles of professional inquiry and discovery to engage in dialogue with nurse leaders as well as interdisciplinary professional managers and leaders in ambulatory care settings. Students will also gain applied experience in ancillary department settings central to health care delivery that are important in maintaining organizational system efficiency and effectiveness but generally are outside the domain of nursing-directed patient care. Ancillary department experiences may take place in ambulatory or inpatient settings. Graded Pass/Fail.

NURS 698. Practicum III: Applied Integrative Health Care Delivery Leadership. 3 Hours.
Semester course; 135 clinical/lab hours. 3 credits. Prerequisite: NURS 697. In this course the student applies a broad range of managerial knowledge, skills and multidisciplinary theoretical constructs, e.g., nursing, business, organizational systems, organizational behavior, strategy and change management. Students will complete a formal organizational-level gap analysis and communicate formally and informally to others in the organization about a strategic and change-management plan to address the nursing issue(s) examined in the gap analysis. Students will gain guided experience from a nurse leader about management roles, the organizational perspective on strategic and change initiatives and implementation techniques. Graded Pass/Fail.

NURS 700. Scientific Integrity: Responsible Conduct of Research. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Enrollment restricted to students admitted to a doctoral program. This course is intended for students to develop and refine their understanding of and skills in applying ethics and law of research, with a focus on the National Institute of Health’s Office for Human Research Protections’ responsible conduct of research topics.

NURS 701. Statistical Methods for Nursing Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Provides knowledge about data management, basic statistical tests, graphics and tables, and necessary software. Presents statistical tests: contingency table analysis, one- and two-sample t-tests, one- and two-factor analysis of variance, simple linear regression, multiple linear regression, and analysis of covariance. Defines selected statistical terminology and concepts. Uses data from relevant studies to illustrate various statistical tests and corresponding assumptions.

NURS 702. Advanced Statistical Concepts for Nursing Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 701. Presents advanced statistical methods and necessary statistical assumptions. Explains optimal modeling approaches for different data types and study designs. Data types: binary data, ordinal data, multinomial data, time-to-event data, longitudinal data, hierarchical data and multivariate data. Analytic methods discussed will include nominal, ordinal and multinomial logistic regression, Kaplan-Meier estimation, Cox proportional hazards model, mixed effects models, factor analysis, principal components, canonical correlation, classification and clustering.

NURS 703. Philosophy of Human Sciences. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: admission to the doctoral program in nursing. Critically analyzes philosophic perspectives and their relationship to human sciences; emphasizes analysis of the underlying epistemology and ontological assumptions of various philosophies. Explores philosophies of science and their influence on the emergence of knowledge in the human sciences, using nursing science as an example.

NURS 704. Analysis and Construction of Theory for Nursing Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 703. This course focuses on analysis and critique of theoretical and conceptual foundations of research and the development process associated with constructing nursing disciplinary knowledge. Emphasis is placed on the processes for concept and theory development within the context of a research trajectory relevant to the discipline.

NURS 706. Teaching in the Health Professions: Surviving and Thriving in Academia. 3 Hours.
Semester course; 3 lecture hours. 3 credits (3 credits lecture). This course examines the transition from health professions clinician to educator and introduces the multiple dimensions of the educator role. Practical information is presented for orienting to the academic environment and thriving in an academic career. Professional, legal and ethical principles associated with higher education are explored.

NURS 720. Foundations of Biobehavioral Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 704 or permission of instructor. This course provides a foundation for critically examining and developing research frameworks and models used to conduct biobehavioral research. The course explores assumptions about the dimensions, interactions and outcomes of biology and behavior from basic science through interventional approaches. This course discusses current applications of biobehavioral research including translational research to improve nursing practice and clinical outcomes.
NURS 721. Advanced Concepts in Biobehavioral Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 720 or permission of instructor. This course focuses on applying concepts and measures used in biobehavioral research. It also discusses biobehavioral research priority areas, current methods and data sources. In addition, students will evaluate the types of measures used in biobehavioral research and relate these to their own focus areas. Students will apply their knowledge from the prerequisite course to develop a research proposal incorporating a research framework, concepts and measures, and methods used in biobehavioral research.

NURS 725. Synthesis and Emerging Trends in Scientific Inquiry. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 720 and NURS 721, or NURS 731 and NURS 732, or permission of instructor. This course explores emerging trends in different areas of scientific inquiry to help students develop their understanding of the current and evolving research environment. Designed to synthesize the current state of the science and apply it to the student's area of research. In addition, the student will apply approaches to incorporating emerging trends into an individualized research program and strategic career development.

NURS 731. Foundations in Health Care Quality Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 704 or permission of instructor. This course provides a foundation for critically examining and developing research frameworks and models used to conduct health care quality of research. The course explores assumptions about health care quality, its dimensions and outcomes at the individual, organizational and population levels. Different approaches to health care quality research will be discussed. Finally, current applications of quality research to policy, health system accountability and various levels of the provision of health care are reviewed.

NURS 732. Advanced Concepts in Health Care Quality Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: NURS 704 or permission of instructor. This course focuses on applying concepts and measures used in quality health services research. It also discusses health care quality research priority areas, current quality and safety measures, and data sources. In addition, students will evaluate the types of quality and safety measures used in health care quality research and relate these to their focus areas. Students will apply their knowledge from the prerequisite course to develop a research proposal incorporating a research framework, concepts and measures, and methods used in health care quality research.

NURS 770. Quantitative Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 701 or permission of instructor; corequisite: NURS 702. This course provides knowledge and skills for identifying and selecting appropriate designs for quantitative health care research. The course analyzes major groups of research designs for fit with various types of research questions. This course examines strengths and weaknesses of the groups of research designs. Focuses on elements of research design that enhance rigor.

NURS 772. Qualitative Research. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course provides knowledge and skills for the design and implementation of qualitative health research and the management and analysis of qualitative data. The course analyzes various research designs for ability to generate scientifically rigorous findings related to nursing or health care. This course explores current challenges, debates and controversies in qualitative research.

NURS 773. Perspectives on Research Design. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: NURS 703 and NURS 704. Analyzes philosophical foundations of a variety of research designs. Explores assumptions underlying the selection and evaluation of quantitative, qualitative and mixed-methods designs. Focuses on the epistemological, ontological and methodological foundations of research design and implications for knowledge development.

NURS 776. Research Program Development Seminar I. 2 Hours.
Seminar course; 1 lecture and 2 seminar hours. 2 credits. Prerequisite: admission to the doctoral program in nursing. Explores the multiple roles in establishing a program of research and the various career-development stages of a scholar. Defines an area of inquiry for knowledge development within a focus area.

NURS 777. Research Program Development Seminar II. 2 Hours.
Seminar course; 1 lecture and 2 seminar hours. 2 credits. Prerequisite: admission to the doctoral program in nursing. Focuses on collaboration within the research team and in the larger research community and involvement in research under the direction of a graduate faculty member. Graded as P/F.

NURS 778. Research Program Development Seminar III. 2 Hours.
Seminar course; 1 lecture and 2 seminar hours. 2 credits. Prerequisite: admission to the doctoral program in nursing. Focuses on collaboration within the research team and in the larger research community and involvement in research under the direction of a graduate faculty member. Graded as P/F.

NURS 791. Special Topics. 3-6 Hours.
Semester course; variable hours. 3-6 credits. May be repeated. Prerequisite: admission to the doctoral program in nursing. Explores specific topics in nursing.

NURS 792. Directed Research Inquiry. 1-6 Hours.
Semester course; variable hours. 1-6 credits. Course may be repeated. A minimum of 3 credits is required as a substitute for a required focus of inquiry course. A maximum of 6 credits is allowed per semester. Prerequisite: admission to doctoral program in nursing and permission of the instructor. Provides a mentored independent study in a selected theoretical or conceptual area of inquiry within the context of a student's research focus. The purpose of this course is to increase the student's knowledge in a selected theoretical or conceptual area. This directed study will be developed under the supervision of a member of the graduate faculty. Graded as P/F.

NURS 796. Directed Research Experience. 1-9 Hours.
Semester course; variable hours. 1-9 credits. A minimum of 2 credits is required by the completion of course work. Prerequisite: admission to the doctoral program in nursing and permission of the instructor. Provides a mentored research experience in areas of faculty research expertise. The purpose of this course is to increase the student's exposure to and involvement in research under the direction of a graduate faculty member who is actively engaged in a research project. This mentored research experience will be developed under the supervision of a member of the graduate faculty. May be taken in the semester(s) the student is preparing for the comprehensive exam and for dissertation preparation prior to admission to candidacy. Graded as P/F.
NURS 797. Practicum in Nursing Research. 1-3 Hours.
Semester course; 1-3 practicum hours (45-135 clinical/lab hours). 1-3 credits (1-3 clinical lab credits). May be repeated. Prerequisite: NURS 700 or permission of instructor. Enrollment restricted to students admitted to a doctoral program and by permission of instructor. This course focuses on the development of skills and techniques for the conduct of research through active participation in either an ongoing faculty research project or an element of the student’s research area. The practicum is structured individually through discussion with the supervising faculty member. Emphasis is on the practical application of research skills and growth in knowledge related to the conduct of research. Graded as Pass/Fail.

Semester course; 1-13 dissertation hours. 1-13 credits. Enrollment restricted to students who have been admitted to candidacy. A minimum of 13 credits is required. Original research conducted under the supervision of an adviser and in conjunction with a dissertation committee. Graded as satisfactory/unsatisfactory.