Courses

**NURSE 1000 Cultural Diversity in Healthcare: 3 semester hours**
This course introduces cultural congruence across the lifespan. Transcultural nursing concepts will be examined, as well as theories & practices in relationship to human caring. Application and analysis of health care practices within selected cultural contexts are explored.

**NURSE 1050 Communication for the Healthcare Professional: 3 semester hours**
This course focuses on the development of communication skills utilized in professional nursing. The individual's relationship with self, individuals, communities, and populations are discussed. Communication and collaboration concepts in nursing are introduced to develop effective human caring relationships with diverse populations.

**NURSE 2000 Nutrition in Health: 3 semester hours**
This course examines nutritional needs across the illness and wellness continuum with emphasis on nutritional principles related to health promotion and protection. Content includes assimilation, digestion and absorption of nutrients, and cultural and economic influences on dietary practices across the lifespan.

**NURSE 2050 Pathophysiology: 3 semester hours**
Prerequisites: BIOL 1141 and BIOL 1162. This course focuses on the normal processes and mechanisms operating within the human body. Explores the nature of disease, its causes and the bodily changes that accompany. The course includes general principles of disease, diseases specific to internal organs, and the clinical implications.

**NURSE 3000 Health Promotion and Disease Prevention Concepts Across the Lifespan: 2 semester hours**
Prerequisites: Admission to nursing clinical major. This course focuses on the role of the nurse in promoting health and reducing risk behaviors of individuals and families across the lifespan. Concepts of nutrition, physical activity, coping and stress management skills, social determinants of health, and health disparities will be examined with an emphasis on the impact of genetics, values, lifestyles and cultural influences. Patient education for health promotion, risk reduction, and disease prevention across the lifespan will be explored.

**NURSE 3005 Introduction to Professional Nursing: 3 semester hours**
Prerequisites: Admission to the Accelerated BSN program. This course introduces students to the role of the professional nurse. Health promotion and disease prevention across the life span are examined. Ethics, legal standards, and healthcare policy concepts are also explored.

**NURSE 3010 Foundations of Professional Practice: 3 semester hours**
Prerequisites: Admission to the nursing clinical major. An introductory course to the discipline of professional nursing. Concepts of nursing process and clinical reasoning are introduced and explored within the context of the domain of nursing (person, environment, health, nursing).

**NURSE 3015 Professional Nursing Concepts and Practice: 6 semester hours**
Prerequisites: Admission to the Accelerated BSN program. Introduction to the structure of the discipline of nursing, selected theoretical and conceptual models, and their application to nursing process, clinical reasoning, and education as a foundation for socialization into professional nursing practice. Includes didactic, laboratory, and clinical components.

**NURSE 3020 Fundamental Concepts of Professional Nursing Practice: 6 semester hours**
Prerequisites: Admission to nursing clinical major. Introduces evidence-based nursing concepts and skills that create the framework for professional nursing practice. Emphasis is placed on fundamental practice concepts including nursing process, clinical decision making, basic physiological and psychosocial health care needs, holistic and culturally congruent care, and the delivery of safe, high quality nursing care across the health-wellness continuum. Students learn and practice skills in a lab setting with the application of acquired skills in a clinical and/or community setting.

**NURSE 3030 Health Assessment Concepts: 4 semester hours**
Prerequisites: Admission to nursing clinical major. This course integrates concepts related to theoretical knowledge and interpersonal skills in the assessment of clients, focusing on differentiating normal from abnormal findings. It emphasizes the use of problem solving, critical thinking, and cultural competency in identifying and documenting multidimensional health variations across the lifespan. The course includes a classroom component and laboratory experiences, including practice of psychomotor skills.

**NURSE 3035 Health Assessment and Promotion: 3 semester hours**
Prerequisites: Admission to the Accelerated BSN Program. Health promotion, client education, and physical assessment skills across the lifespan are developed using the nursing process framework. Didactic and laboratory components are included.

**NURSE 3040 Concepts of Evidence-Based Practice: 3 semester hours**
Prerequisites: Admission to nursing clinical major. This course focuses on utilizing evidence-based practice to promote health and wellness, illness, and prevent injury among individuals, families, communities, and populations. Emphasis is placed on education, collaboration, utilizing evidence in practice for quality improvement, and resource utilization. This course builds on content presented in previous coursework and increases the complexity of students’ mastery of focus concepts.

**NURSE 3050 Concepts of Pharmacology: 3 semester hours**
Prerequisites: Admission to nursing clinical major. Building upon knowledge of illness and wellness concepts developed in previous coursework, students will learn to apply this knowledge to the pharmacotherapeutic component of caring for patients across the lifespan.

**NURSE 3055 Foundations of Nursing Pharmacotherapeutic Concepts: 3 semester hours**
Prerequisites: NURSE 3005, NURSE 3015. This course covers concepts and principles of pharmacology across the lifespan with an emphasis on pharmacotherapeutics and an evidence-based, comprehensive approach to the clinical application of drug therapy. Cultural considerations, individual needs, and patient education related to pharmacology are examined.

**NURSE 3060 Behavioral Health Concepts: 5 semester hours**
Prerequisites: NURSE 3000, NURSE 3010, NURSE 3020, and NURSE 3030. This course focuses on mental health and illness across the lifespan for individuals experiencing emotional distress, crisis, and severe, persistent mental illness. Students will increase basic skills in interpersonal communication, decision-making, and professional behavior as they utilize theory concepts and research from nursing, psychology, pharmacology, and other disciplines in the provision of care to individuals, families, groups, and vulnerable populations. The course includes basic theory and clinical experiences in hospital and community settings. Students will complete 90 clinical hours.
NURSE 3065 Professional Nursing Adult and Elder Care I: 5 semester hours
Prerequisites: NURSE 3005, NURSE 3015, NURSE 3035. This course covers nursing care of adult and elder patients including healthy aging and maintenance of functional capacity. Its content addresses common physiologic and social changes, challenges, and adaptations affecting adult and elder populations. Strategies for health promotion and disease management are addressed in the care of adult and elder patients experiencing fluid and electrolyte imbalances, cardiovascular, integumentary, immunologic, pulmonary, and hematologic alterations. Pathophysiologic processes of organ systems are explored. Didactic and clinical components are included.

NURSE 3070 Concepts of Caring for Adults I: 5 semester hours
Prerequisites: NURSE 3000, NURSE 3010, NURSE 3020 and NURSE 3030. This course focuses on the nursing care of the adult patient experiencing selected pathophysiological processes affecting body regulatory mechanisms. These mechanisms are related to multiple concepts across the illness and wellness continuum. Emphasis is placed on health restoration, maintenance and support of chronic illness as well as the continued development of critical thinking processes, and evidence-based nursing practice. This course includes lecture and active learning within the classroom, as well as a clinical component. Students will complete 90 clinical hours.

NURSE 3075 Professional Nursing Mental Health: 5 semester hours
Prerequisites: NURSE 3015, NURSE 3055. This course covers theoretical knowledge and skill to promote the mental health of patients across the lifespan. Common and complex mental health disorders affecting individuals, families, and communities are examined. Students will learn and apply therapeutic communication techniques with patients experiencing mental health disorders. Ethical, moral, and legal issues in mental health nursing practice are addressed. Didactic and clinical components are included.

NURSE 3206 Adult Health Nursing II: 5 semester hours
Prerequisites: All 3100 level nursing courses, NURSE 3205, and PSYCH 2268. This course focuses on the nursing care of the adult experiencing selected pathophysiological processes affecting body regulatory mechanisms. These mechanisms are related to endocrine, sensory-perceptual, gynecological, and genitourinary functions. Emphasis is placed on health restoration, maintenance and support as well as the continued development of the nurse-client relationship, critical thinking processes, and research-based nursing practice. This course includes classroom and clinical activities in a variety of settings.

NURSE 3350 Nursing of Adults II: 5 semester hours
Prerequisites: NURSE 3120, NURSE 3121. This course focuses on the nursing care of the adult experiencing complex pathophysiologic processes affecting body regulatory mechanisms. These mechanisms are related to endocrine, neurological, musculoskeletal, gastrointestinal, sensory-perceptual, male reproductive and genitourinary problems. This course also incorporates relevant concepts of pathophysiology and pharmacology related to these conditions. Emphasis is placed on health promotion and restoration, maintenance and support, as well as the continued development of the nurse-client relationship, critical thinking and evidence-based nursing practice across the adult life span. NURSE 3350 and NURSE 3351 are co-requisites to be taken together in an 8-week period.

NURSE 3351 Clinical Nursing of Adults II: 3 semester hours
Prerequisites: Co-requisite with NURSE 3350. This course focuses on the nursing care of adults in the lab, clinical agency and simulation environments. Utilizing an integrated approach, complex psychomotor skills and assessment techniques for adult clients are mastered in patients with musculoskeletal problems, endocrine alterations, renal/genitourinary problems, sensory-perceptual problems, and liver problems. Clinical reasoning is developed and applied in order to provide safe and effective nursing care to adult clients with complex problems across the health/illness continuum. NURSE 3350 and NURSE 3351 are co-requisites to be taken together in an 8-week period.

NURSE 3360 Maternal-Child Nursing: 5 semester hours
Prerequisites: PSYCH 2268, NURSE 3120, NURSE 3121. This course focuses on women's reproductive health, childbearing and child-rearing families, as well as the health and illness of children from conception through adolescence. There is an emphasis on family dynamics, growth and development, and communication with children and their families. Health care policy and systems are incorporated as they relate to diverse populations. NURSE 3360 and NURSE 3361 are co-requisites to be taken together in an 8-week period.

NURSE 3361 Clinical Maternal-Child Nursing: 3 semester hours
Prerequisites: Co-requisite with NURSE 3360. Health promotion, protection, restoration, and maintenance for the mother-child and family care are addressed in experiences that include nursing skills lab, hospital agency and a variety of community settings. NURSE 3360 and NURSE 3361 are co-requisites to be taken together in an 8-week period.

NURSE 3799 Statistics for Population Health: 3 semester hours
Prerequisite: Admission to the College of Nursing's RN to BSN Program. This course provides students with an introduction to the use and interpretation of basic statistics, statistical databases, and data analysis. Basic statistical techniques will be introduced and utilized to identify and support evidence-based clinical decisions related to health and society.

NURSE 3807 Research and Evidence-Based Nursing Practice: 3 semester hours
Prerequisites: NURSE 3799 (or equivalent) and NURSE 3817. This course prepares nurses to provide evidence-based care to patients among the rapid advances in the science and technology of healthcare. This course provides a basic understanding of how evidence is developed, including the research process, clinical judgment, interprofessional perspectives, and patient preference as applied to nursing practice. Students will learn a systematic method to evaluate and apply research findings and other evidence in designing and implementing nursing care that is multidimensional, high quality, and cost-effective.

NURSE 3817 Introduction to Health and Nursing Informatics: 3 semester hours
This online laboratory course establishes competency in fundamental information management and computer technology skills. It enables students to use existing information systems and available information to manage nursing practice. Students critically evaluate technology, information, and its sources; use decision support systems designed for clinical decision making; and focus on the representation of nursing data, information, and knowledge.

NURSE 3873 Guided Study in Nursing: 1-3 semester hours
This course is an in-depth independent study of selected topics in nursing under the guidance of a specific instructor. No more than six hours may be taken under this option.
NURSE 3900 Role of the Baccalaureate-Prepared Nurse: 3 semester hours
Prerequisite: Admission to the College of Nursing's RN to BSN Program. This course provides an overview of the expanded expectations of the baccalaureate-prepared nurse in today's changing healthcare climate. The role of the baccalaureate prepared nurse in influencing healthcare delivery, healthcare systems, and health outcomes of individuals, families, and communities will be explored.

NURSE 3910 Nursing Theory for Population Health: 3 semester hours
Prerequisites: Admission to the College of Nursing's RN to BSN Program. This course provides the opportunity to examine evidence-based practice nursing interventions, select theories, models, assessment strategies, and tools that can be used to promote health for populations. The roles and responsibilities of the professional nurse in population-based health systems will be explored.

NURSE 3920 Health Assessment for the Professional Nurse: 3 semester hours
Prerequisite: Admission to the College of Nursing's RN to BSN Program. This course will incorporate a holistic, multidimensional approach that culminates in the ability to perform a comprehensive health assessment. The course will emphasize the use of clinical reasoning to determine areas in which health promotion activities should be implemented. The impact of social determinants of health, genomics, lifestyle, environmental factors, literacy, and culture will be explored.

NURSE 3930 Nursing Research and Evidence-Based Practice for the Professional Nurse: 3 semester hours
Prerequisite: Admission to the College of Nursing's RN to BSN Program. This course prepares nurses to provide evidence-based nursing care to patients among the rapid advances in the science and technology of healthcare. This course provides a basic understanding of how evidence is developed, including the research process, clinical judgment, interprofessional perspectives, and patient preference as applied to nursing practice. Students will learn a systematic method to evaluate and apply research findings and other evidence in designing and implementing nursing care that is multidimensional, high quality, and cost-effective.

NURSE 3940 Leadership and Management for Professional Nursing: 3 semester hours
Prerequisites: Admission to the College of Nursing's RN to BSN Program. This course prepares the nurse to coordinate and manage client care in diverse health care settings. The use of information systems and data to guide management decisions will be emphasized. Leadership and management concepts, issues, and functions as applied to the role of the professional nurse in delivering culturally competent, safe, and quality care will be examined.

NURSE 4010 Concepts of Caring for Adults II: 5 semester hours
Prerequisites: NURSE 3050 and NURSE 3070. This course focuses on the application of nursing care of the adult patient experiencing selected pathophysiological processes affecting body regulatory mechanisms across the illness and wellness continuum. Emphasis is placed on health restoration, maintenance and support of acute illness as well as the continued development of the nurse-client relationship, critical thinking processes, research-based nursing practice and use of technology. A focus on care collaboration, communication, quality of care, health care ethics and legal implications is provided. This course includes lecture and active learning, in addition to a clinical portion. Completion of 90 clinical hours.

NURSE 4015 Professional Nursing Adult & Elder Care II: 5 semester hours
Prerequisites: NURSE 3065. This course covers nursing care of adult and elder patients including healthy aging and maintenance of functional capacity. Content addresses common physiologic, psychological, and social changes, challenges, and adaptations affecting adult and elder populations. Strategies for health promotion and disease management are addressed in the care of adult and elder patients experiencing genitourinary, gastrointestinal, neurological, endocrine, musculoskeletal, health restoration, and/or sensory-perceptual alterations. Pathophysiologic processes of organ systems are explored. Didactic and clinical components are included.

NURSE 4025 Care of Women and Children Clinical: 2 semester hours
Prerequisites: Concurrent enrollment in NURSE 4020 and NURSE 4030. This clinical course focuses on the application of health and illness continuum concepts of the gravid woman, newborn, family, and child in relation to nursing care, in addition to women across the lifespan. This course builds on knowledge developed in previous coursework. Students will complete a pediatric-focused clinical of 45 hours and a maternal-focused clinical of 45 hours. Concurrent enrollment in NURSE 4020 and NURSE 4030 is required.

NURSE 4035 Nursing Care of Children: Infancy to Adolescence: 4 semester hours
Prerequisites: NURSE 3035, NURSE 3055. This course covers pediatric health promotion and disease management with an emphasis on integration of the concepts of communication and growth and development to provide primary, secondary, and tertiary levels of prevention for children and their families. Nursing care of pediatric patients experiencing acute and chronic illness are examined. Didactic and clinical components are included.

NURSE 4045 Nursing Care of the Childbearing Patient-Family System: 4 semester hours
Prerequisites: NURSE 3035, NURSE 3055. This course covers theoretical basis and clinical skills necessary to provide quality care to patient/family systems during the childbearing/child-rearing stages of life with an emphasis on family and system theories. Didactic and clinical components are included.

NURSE 4050 Concepts of Community Focused Care: 5 semester hours
Prerequisites: NURSE 3070, NURSE 4010, NURSE 4020, and NURSE 4030. This course includes a variety of experiences to prepare the student to assess the health care needs in diverse community settings and develop interventions to meet those needs. Student will complete 90 clinical hours. Concurrent enrollment in NURSE 4060 and NURSE 4065 is required.

NURSE 4060 Synthesis of Concepts in Professional Nursing: 4 semester hours
Prerequisites: NURSE 3070, NURSE 4010, NURSE 4020, and NURSE 4030. This course will focus on the synthesis of previous nursing concepts and general education courses with the goal of preparing the student for entry into professional nursing practice. Areas of study are selected from across the lifespan, including diverse populations in a variety of healthcare systems. This course builds upon knowledge developed in previous coursework. Concurrent enrollment in NURSE 4050 and NURSE 4065 is required.
NURSE 4065 Synthesis of Professional Practice Immersion Clinical: 4 semester hours
Prerequisites: Concurrent enrollment in NURSE 4050 and NURSE 4060. This clinical course includes a variety of experiences to prepare the student nurse to lead, coordinate, and manage client care in diverse health care settings. This course includes evidence-based strategies. Areas of practice are selected from across the lifespan, including diverse populations in a variety of health care systems. Students will complete 180 clinical hours. Concurrent enrollment in NURSE 4050 and NURSE 4060 is required.

NURSE 4075 Global Health Immersion: 3 semester hours
Prerequisite: Consent of instructor. This is an international healthcare trip that will include a full immersion experience into a foreign culture with emphasis on the analysis of healthcare systems and social determinants of health. Core coursework may include basic foreign language skills, a review of historical and cultural concepts relevant to the country, and application of medical/nursing treatment options. This course may be taken twice for credit.

NURSE 4105 Professional Nursing Leadership and Synthesis: 8 semester hours
Prerequisites: NURSE 3065, NURSE 3075, NURSE 4015, NURSE 4035, NURSE 4045. This course is a leadership practicum experience which reflects synthesis of cognitive and affective skills acquired in the Accelerated BSN program. Areas of study are selected from across the lifespan, including diverse populations in a variety of healthcare systems. Didactic and clinical components are included.

NURSE 4125 Community Nursing and Public Health: 5 semester hours
Prerequisites: NURSE 3065, NURSE 3075, NURSE 4015, NURSE 4035, NURSE 4045. This course is a synthesis of community and public health nursing that prepares students to apply, promote, and protect the health of patients, families, communities, and populations. Global perspectives on health equity, policy, and diversity are explored. Didactic and clinical components are included.

NURSE 4135 Evidence-Based Practice: Integration of Research in Professional Nursing: 2 semester hours
Prerequisites: Admission to the Accelerated BSN Program. This course is designed to provide a foundational theoretical review of evidence-based practice in the nursing profession. Students synthesize knowledge and skill from the natural and behavioral sciences, humanities, and nursing in order to understand the research process and its relevance in guiding nursing practice and improving patient care. Emphasis is placed on identifying and using research evidence in clinical decision making.

NURSE 4531 Clinical Leadership Development and Professional Nursing Practice: 4 semester hours
Prerequisites: NURSE 4530. This clinical course includes a variety of experiences to prepare the student nurse to lead, coordinate, and manage client care in diverse health care settings. This course includes research-based strategies utilized for health promotion and protection, health restoration, maintenance, and support. Areas of study are selected from across the lifespan, including diverse populations in a variety of health care systems.

NURSE 4720 Perioperative Nursing: 3 semester hours
Prerequisites: NURSE 3070. Provides experiences in preoperative, intraoperative, and postoperative settings. Includes a clinical component.

NURSE 4723 Nurse Externship: 3 semester hours
Prerequisite: Senior level status; GPA 3.0 (4.0 scale). This course provides the opportunity to apply theoretical and conceptual knowledge and skills in a structured clinical environment under the guidance of a mentor.

NURSE 4730 Nursing Care at the End of Life: 3 semester hours
Prerequisites: NURSE 3060, NURSE 3070. This course focuses on the nursing care of terminally ill patients and their families. Topics explored will include the impact of personal values and beliefs about death, physiology of end stage disease processes, symptom assessment and management, psychosocial and spiritual support, consideration in special patient populations, societal issues and trends in end of life care, ethical considerations in caring for the dying patient, grief and bereavement processes, and the role nursing in end of life care across settings.

NURSE 4741 Advanced Nursing Assessment and Management of Clients with Cardiac Dysrhythmias: 3 semester hours
Prerequisite: NURSE 3070. Focuses on advanced nursing assessment and management of clients with cardiac rhythm problems and conduction disturbances. Includes a clinical component.

NURSE 4900 Ethics and Values in Population Health: 3 semester hours
Prerequisites: Admission to the College of Nursing’s RN to BSN program. This course provides an introduction to the impact of values and ethical issues on professional nursing practice and population health. Emphasis is on values clarification, ethical theories and principles, ethical decision-making, and professional ethical standards. Ethical issues affecting nursing practice and the delivery of care will be explored.

NURSE 4910 Health Policy for the Professional Nurse: 3 semester hours
Prerequisites: Admission to the College of Nursing’s RN to BSN Program. This course familiarizes the professional nurse with health care policy and how it impacts the delivery of health care. The role of the nurse in influencing health outcomes and improving health care for populations through the policy process will be explored.

NURSE 4911 Community and Population Health Synthesis: 6 semester hours
Prerequisites: Admission to the College of Nursing’s RN to BSN Program and RN Licensure. This practicum course focuses on community-based application and synthesis of professional nursing roles and responsibilities across a continuum of health care settings, with selected populations determined to be at risk for a variety of health-related problems. Students integrate and apply curricular concepts such as health policy, epidemiology, health promotion strategies, and evidence-based practice in planning care for a select population. This is taken during the last semester of RN to BSN courses. This course consists of 4 semester hours of didactic and 2 semester hours of clinical.

NURSE 6075 Advanced Global Health Immersion: 3 semester hours
Prerequisites: Consent of the instructor and graduate standing. This is an international healthcare trip that will include a full immersion experience into a foreign culture with emphasis on the analysis of healthcare systems and social determinants of health. Core coursework may include basic foreign language skills, a review of historical and cultural concepts relevant to the country, and application of medical/nursing treatment options. This course may be taken twice for credit.

NURSE 6111 Healthcare Systems: 3 semester hours
Prerequisites: Graduate standing. This course introduces the historical development, current structure, and projected transformation of the U.S. healthcare system and provides the student with an understanding of the complex nature of the healthcare sector.
NURSE 6130 Research, Interventions and Evidence-Based Practice: 3 semester hours
Prerequisites: Consent of Program Director. This course provides opportunities to examine the processes and evaluation components of evidence-based practice, including the identification of significant clinical problems, evaluation of evidence underlying competing interventions, effectiveness of interventions, and implementation and evaluation of health promotion and therapeutic interventions that improve the quality of care or health outcomes for individuals, groups, and populations. Students will have opportunities to develop skills needed to critically analyze scientific literature foundational to implementing evidence-based practice projects.

NURSE 6320 Learning and Curriculum Development in Nursing: 3 semester hours
Prerequisites: NURSE 6309. This course examines theoretical foundations, principles, and issues in curriculum design. Explores systematic evaluation of curriculum at all levels.

NURSE 6321 Instructional Strategies in Nursing: 3 semester hours
Prerequisites: NURSE 6309 or consent of instructor; must be taken concurrently with NURSE 6320. This course focuses on the development and analysis of teaching and learning strategies in nursing education. Adult learning principles of teaching and learning will be incorporated into the innovative strategies developed within this course. Integration of new technology in instructional design and delivery will be highlighted. Evaluation methods of both teacher and learner will be explored.

NURSE 6322 Evaluation Strategies in Nursing: 3 semester hours
Prerequisites: NURSE 6309. This course provides students the opportunity to learn evaluation concepts, including testing and measurement in nursing education at the didactic, clinical, and programmatic levels. Content includes strategies to assess and evaluate learning in the cognitive, psychomotor and affective domains. Quality improvements, as well as legal and ethical considerations are explored. Key concepts include criterion and norm referenced theory and technique; reliability, validity, and the associated descriptive statistics; preparation of instrumental objectives for use in developing classroom tests and clinical nursing performance evaluations.

NURSE 6418 Organizational Behavior and Human Resource Management in Healthcare: 3 semester hours
Prerequisites: Graduate standing. This course applies theory and concepts from organizational behavior and human resources to the healthcare system as a framework for improving an organization's performance.

NURSE 6420 Healthcare Law and Regulation: 3 semester hours
Prerequisites: Consent of Program Director. This course introduces and examines a wide range of topics in the area of health law and regulation, and discusses how laws and regulations can promote or impede health and well-being. Students will explore concepts that inform healthcare policy, potential legal problems addressed in healthcare settings, and how laws and regulations affect health and well-being. The course includes mandatory didactic and clinical experiences.

NURSE 6424 Social Determinants of Health for Underserved Populations: 3 semester hours
Prerequisites: Graduate standing. This course examines the health and well-being of underserved populations through the lens of the social determinants of health. The course will explore responses to social factors that adversely influence vulnerability and health behaviors.

NURSE 6518 Pathophysiology for Advanced Nursing Practice: 3 semester hours
Prerequisites: Consent of Program Director. This course prepares the student to interpret changes in physiology that result in symptoms indicative of illness by a systematic examination of disease processes. The graduate student will compare and contrast differential diagnosis within physiological systems of sub-cellular and cellular origin, biochemical, and anatomical changes across the life span.

NURSE 6520 Pharmacology for Advanced Nursing Practice: 3 semester hours
Prerequisites: NURSE 6518 or consent of Program Director. This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classifications, actions, interactions, and adverse drug reactions. The major focus of the course is the pharmacotherapeutic use of medications for primary healthcare management by advanced practice nurses. Emphasis is placed on clinical critical thinking processes used to prescribe drugs in the management of specific illnesses. The laws and regulations for advanced practice nurse prescriptive authority will be addressed. Emphases include pharmacodynamics, pharmacokinetics, pharmacotherapeutics, health-related information, medication compliance, and issues that pertain to the prescribing of medications in advanced nursing practice.

NURSE 6521 Healthcare Finance: 3 semester hours
Prerequisites: Graduate admission. This course analyzes various financial sectors of the healthcare system. Analyses of the financial and economic structures for providers, health insurance organizations, pharmaceutical industries, not-for-profit, and federally-funded clinics will occur.

NURSE 6524 Health Assessment for Advanced Nursing Practice: 3 semester hours
Prerequisites: NURSE 6518 or consent of Program Director. This course provides a systematic approach to advanced physical assessment as well as psychological, sociocultural, developmental, and spiritual assessment of individuals across the life span. This course builds upon basic health assessment knowledge and skills, laboratory work interpretation, validation, documentation, and analysis of assessment findings. This course includes mandatory didactic and clinical experiences.

NURSE 6527 Patient Safety, Performance Improvement, and Compliance: 3 semester hours
Prerequisites: Graduate standing. This course covers the key principles of patient safety, performance improvement, and compliance. The epidemiology of healthcare error, distinguishing safety from quality, and understanding the policy environment for patient safety will be examined. Strategies to enhance patient safety, evaluation of performance improvement activities, and the management for the risk of error will be addressed.

NURSE 6530 Introduction to Diagnostic Reasoning: 3 semester hours
Prerequisites: Consent of Program Director. This course provides an introduction to the interpretation and appropriate use of diagnostic measures for advanced practice nurses in primary care settings. Special attention is paid to laboratory, radiographic and diagnostic testing. In addition, clinical opportunities will be provided to gain clinical interventional skills for advanced practice nursing.
NURSE 6660 Introduction to Health Systems Management, and Policy for Underserved: 3 semester hours
Prerequisites: Consent of Program Director. This course provides a comprehensive survey of the U.S. health care system, healthcare policy, integrative care practice models, and management principles useful in primary care settings dedicated to underserved populations. Selected topics include health behaviors, health maintenance and the management of primary healthcare in underserved populations, access to mental health care and substance abuse treatment, the U.S. healthcare system (both public and private sectors), the legal and ethical bases for caring for the underserved, the public policy-making process, and management principles of strategic planning, marketing, and project management in clinics serving the underserved. The analysis of community health indicators, health disparities, and healthcare trends impacting underserved populations will be incorporated into a community based experience.

NURSE 6721 Foundations of Psychiatric Mental Health: 3 semester hours
Prerequisites: NURSE 6518, NURSE 6520, NURSE 6524. This course provides a foundation for students to assume advanced practice nursing roles in health promotion, disease prevention, diagnosis, and management of psychiatric health and mental illness across the lifespan and within the family context. A foundation for an integrative practice, including psychiatric interviewing, psychotherapy, neurobiology, and psychopharmacology for the management of psychiatric conditions will be developed.

NURSE 6722 Foundations of Adolescent and Geriatric Health: 3 semester hours
Prerequisites: NURSE 6518, NURSE 6520, NURSE 6524. This course provides a foundation for students to assume an advanced practice nursing role in the care of adolescent and geriatric populations. Therapeutic strategies to address adolescent and geriatric health promotion, preventative care and the most common health conditions managed in these populations in primary care practice will be developed.

NURSE 6723 Foundations of Pediatric Health: 3 semester hours
Prerequisites: NURSE 6518, NURSE 6520, NURSE 6524. This course provides a foundation for students to assume advanced practice nursing roles in health promotion, disease prevention, diagnosis and management of health and illness in newborn, infant, child and adolescent populations within the family context. Therapeutic strategies about pediatric preventive care, behavioral health, common pediatric office-based procedures, pediatric prescribing practices, and the most common health problems managed in pediatric primary care will be developed.

NURSE 6724 Foundations of Women's Health: 3 semester hours
Prerequisites: NURSE 6518, NURSE 6520, NURSE 6524. This course provides a foundation for students to assume an advanced practice nursing role in health promotion, disease prevention, health maintenance, and the diagnosis and management of common conditions affecting women across the lifespan. Emphasis is placed on clinical assessment and decision making related to primary care management of reproductive growth and development, common acute and chronic primary health conditions, and behavioral health in gender-related populations.

NURSE 6730 Nursing Administrative Leadership in Healthcare I: 3 semester hours
Prerequisites: NURSE 6418, NURSE 6526, NURSE 6527. This course focuses on enhancing administrative practice skills through analysis of concepts appropriate to a variety of nursing and health care delivery systems. The focus will be on developing skills needed for nursing and health care administrative leadership practice in complex health care systems in the core domain of knowledge of the healthcare environment. NURSE 6731 Nursing Administrative Leadership in Healthcare II: 3 semester hours
Prerequisites: NURSE 6418, NURSE 6526, NURSE 6527. This course focuses on enhancing administrative practice skills through analysis of concepts appropriate to a variety of nursing and health care delivery systems. The focus will be on developing skills needed for nursing and health care administrative leadership practice in complex health care systems in the core domains of communication and relationship building, leadership, professionalism, and business skills and principles for healthcare.

NURSE 6737 Psychiatric Mental Health I: 4 semester hours
Prerequisites: NURSE 6721. This course develops the advanced practice nursing role in caring for individuals with a mental health disorder, across the lifespan and within the family context. Strategies for the assessment, diagnosis and holistic management of common mental health disorders will be developed.

NURSE 6738 Psychiatric Mental Health II: 4 semester hours
Prerequisites: NURSE 6737. This course investigates the role of the psychiatric health mental nurse practitioner in the restoration and promotion of mental health. Strategies into the assessment, diagnosis and holistic management of individuals with complex mental health needs, including the application of advanced prescribing practices, psychotherapeutic care, and maintenance of overall healthcare needs will be developed.

NURSE 6739 Adult Health I: 4 semester hours
Prerequisites: NURSE 6722 or NURSE 6723. This course prepares students to assume an advanced practice nursing role when caring for adults across the lifespan within a family context. Strategies for the assessment, diagnosis, and holistic management of common acute, chronic, and behavioral health conditions addressed in a primary care setting for adults will be developed.

NURSE 6740 Adult Health II: 4 semester hours
Prerequisites: NURSE 6739. This course prepares students to assume an advanced practice nursing role in caring for adults across the lifespan within a family context. Strategies for the assessment, diagnosis, and holistic management of common acute, chronic, and reproductive health conditions addressed in a primary care setting will be developed.

NURSE 6741 Family Health I: Diagnosis and Management of Advanced Practice Nursing: 4-5 semester hours
Prerequisites: NURSE 6518, NURSE 6520, NURSE 6524 or consent of the Program Director. This course builds upon the advanced practice foundational courses of pathophysiology, pharmacology and advanced physical assessment to prepare students to assume roles in the advanced nursing care of individuals and families across the lifespan. Emphasis is placed on clinical assessment and decision-making in the provision of direct patient care within a defined scope of practice. Students will synthesize prior learning and apply primary prevention strategies into the diagnosis and holistic management of common acute, chronic and mental health problems in this population.
NURSE 6742 Family Health II: Diagnosis and Management in Advanced Practice Nursing: 4-5 semester hours
Prerequisites: NURSE 6741 or consent of Program Director. This course builds upon the advanced practice foundational courses of pathophysiology, pharmacology and advanced physical assessment to prepare students to assume roles in the advanced nursing care of individuals and families across the lifespan. Emphasis is placed on clinical assessment and decision-making in the provision of direct patient care within a defined scope of practice. Students will synthesize prior learning and apply primary prevention strategies into the diagnosis and holistic management of common acute, chronic and mental health problems in this population.

NURSE 6743 Pediatric Health I: Acute and Chronic Care: 4 semester hours
Prerequisites: NURSE 6723. This course prepares students for the advanced practice nursing role when caring for infants, children, and the adolescent populations within the family context. Strategies for the assessment, diagnosis and holistic management of common episodic complaints and chronic condition management in the pediatric primary and acute care settings will be developed.

NURSE 6744 Pediatric Health II: Comprehensive Primary Care: 4 semester hours
Prerequisites: NURSE 6743. This course prepares students for the role of the advanced practice nurse in the pediatric primary care setting and in the promotion of child health. Strategies for the assessment, diagnosis and holistic management of children with complex health needs in providing effective health promotion and health care services will be developed.

NURSE 6745 Pediatric Health II: Complex Acute Care: 4 semester hours
Prerequisites: NURSE 6743. This course prepares students for the role of the pediatric nurse practitioner in restoring a child's health when complex illness or injury occurs in the acute care setting. Strategies into the assessment, diagnosis and holistic management of children with complex health needs will be developed.

NURSE 6746 Women's Health I: 4 semester hours
Prerequisites: NURSE 6724. This course prepares students to assume roles in the advanced nursing care of women considering related gender issues across the lifespan with an emphasis on common acute and chronic gynecologic conditions. Strategies for the diagnosis and holistic management of common acute and chronic gynecologic health problems in gender-related populations will be developed.

NURSE 6747 Women's Health II: 4 semester hours
Prerequisites: NURSE 6746. This course prepares students to assume roles in the advanced nursing care of women with an emphasis on reproductive healthcare. Strategies for the diagnosis and holistic management of complex reproductive health conditions including preconception, obstetrical, and postpartum care as well as family planning and infertility will be developed.

NURSE 6870 Special Topics in Advanced Practice Nursing: 1-3 semester hours
Prerequisites: Consent of instructor. Explore special topics for the advanced practice nurse in the areas of research, theory, education and administration. No more than three hours shall be applied toward the degree. This course is for graduate MSN or PhD levels.

NURSE 6875 Special Study in Graduate Nursing: 1-3 semester hours
Prerequisites: Admission to MSN program or consent of instructor. In-depth study of selected topics in nursing under the guidance of a specific instructor. No more than three hours may be applied to the master's program of study.

NURSE 6934 Leadership in Population Health and Healthcare Systems Residency I: 2-4 semester hours
Prerequisites: Consent of the instructor and graduate standing. This clinical course is designed to provide a theoretical and practical base for leadership development in population health and community health and organizational management. Emphasis is placed on clinical assessment and decision-making in the populations and community-level interventions to change health outcomes. The student is expected to clinically apply the concepts and theories discussed in class that address health disparities in underserved populations, infectious diseases, and community-level responses to chronic conditions. Clinical experiences are designed to enhance assessment and technical skills.

NURSE 6935 Leadership in Population Health and Healthcare Systems Residency II: 2-4 semester hours
Prerequisites: Consent of the instructor and graduate standing. This clinical course provides continued precepted experiences that allow students to develop the nurse practitioner role and clinical competencies within their specific emphasis area. Students integrate theory and clinical competencies to provide preventative care, health promotion, health education, health systems leadership, policy and evidence-based care populations.

NURSE 6954 Advanced Practice Nursing: Residency I: 2-4 semester hours
Prerequisites: NURSE 6738, NURSE 6740, NURSE 6742, NURSE 6744 or NURSE 6747. This clinical course provides precepted experiences that allow students to continue to develop the nurse practitioner role and clinical competencies within their specific emphasis area. Students integrate theory and clinical competencies to provide preventative care, health promotion, health education and evidence-based care for acute, chronic and mental health conditions for individuals and families.

NURSE 6955 Advanced Practice Nursing: Practicum I: 1-3 semester hours
Prerequisites: NURSE 6954. This clinical course provides a continuation of precepted experiences that allow students to develop the nurse practitioner role and clinical competencies within their specific emphasis area. Students integrate theory and clinical competencies to provide preventative care, health promotion, health education and evidence-based care for acute, chronic and mental health conditions for individuals and families.

NURSE 7200 State of the Science in Nursing Research and Practice: 3 semester hours
Prerequisites: Consent of Program Director. This course examines the state of scientific knowledge in nursing research and practice. Gaps in the nursing research and practice are identified. Interrelationships between nursing science and scientific developments in other disciplines from the perspectives of health outcomes, population health indices, and policy implications of scientific progress are analyzed. Advances in biophysiological, psychosocial, sociocultural, health systems, and health economics research and the implications for translation to improve nursing science and practice are analyzed.
NURSE 7209 Advanced Nursing Roles and the Role of the DNP: 3 semester hours
Prerequisites: Consent of Program Director. This course provides students with the opportunity to synthesize and analyze knowledge of the advanced nursing role and the DNP role within a specified population focus and role. The overview of selected theories and frameworks that can be used to guide advanced practice nurses and nursing leaders in facilitating the use of evidence-based practice, understanding cultural aspects of care, and framing situational awareness. Emphasis includes sub-roles of the doctorally-prepared nurse including Advance Practice Registered Nurse (APRN), leader, consultant, expert, researcher, and educator.

NURSE 7211 Biostatistics I: 3 semester hours
Prerequisites: Consent of Program Director. This course provides a foundational understanding of the use of biostatistics in conducting research. Types of data, data description, logic of sampling and test statistics, hypothesis testing, type 1 and type 2 errors, covariates and confounding variables, and clinical versus statistical significance are included. Opportunities will be provided to gain skills conducting statistical analysis using SPSS, interpreting the results of analytic processes, and applying the results to common health and illness examples encountered in research publications.

NURSE 7212 Biostatistics II: 3 semester hours
Prerequisites: NURSE 7211 or permission of the instructor. This course emphasizes applications of inferential statistics including analysis of variance, simple and multiple linear and logistic regression models, tests of mediation and moderation, and repeated measures and an introduction to longitudinal analyses. The analytic methods and applications will be framed within the health science research field with emphases placed on designing and conducting studies and appropriate analyses using the techniques described above.

NURSE 7213 Biostatistics III - Structural Equation Modeling: 3 semester hours
Prerequisites: NURSE 7211 Biostatistics I (or its equivalent), NURSE 7212 Biostatistics II (or its equivalent). This course serves as an introduction to structural equation modeling (SEM). The overall objective is to develop a solid conceptual and theoretical understanding and ability to use SEM and its extensions correctly and effectively in independent research. Topics include factor analysis, path analysis, and basic principles of model building. Applications and extensions of SEM, such as scale construction and validation, mediation and moderation, multi-group analyses, and latent growth modeling are also included. Students will have the opportunity to work on projects tailored to their research interests and needs.

NURSE 7215 Evidence-Based Practice for the DNP: 3 semester hours
Prerequisites: Graduate standing. This course examines the state of clinical inquiry and the implementation of evidence into practice. The relationship between clinical questions and the critical appraisal and synthesis of research and literature is explored. Models for implementing and sustaining change based on the evidence are examined.

NURSE 7220 Leadership in Practice: 3 semester hours
Prerequisites: Graduate standing. This course explores various leadership theories, models, and issues that facilitate effective planning, implementation, and evaluation of healthcare initiatives within select healthcare systems. A course focus will be on the use of advanced communication skills and interprofessional collaboration to achieve optimal health outcomes and sustain positive change initiatives.

NURSE 7230 Epidemiology: 3 semester hours
Prerequisites: Graduate standing. This course covers epidemiology, logistic modeling, and public health surveillance in primary healthcare. It provides an introduction into investigation of outbreaks. The course will enable the healthcare professional to develop a knowledge base to address issues of health and illness of a population.

NURSE 7240 Health Informatics: 3 semester hours
Prerequisites: Consent of the Program Director. This course explores information systems and computer technologies that can improve the health of individuals, families, communities, and populations by optimizing information management and communication. Focus areas include the electronic medical record, technologies to improve patient safety, standards for privacy and security, tele-health systems to improve healthcare access to underserved populations, use of web-enhanced technologies for research translation, and strategies to provide data for decision making and evidence-based databases. Emphasis is placed on developing competence in technology use for the purpose of program evaluation, establishing healthcare quality, and improving healthcare delivery to diverse populations in complex healthcare settings.

NURSE 7251 Healthcare Economics: 3 semester hours
Prerequisites: Consent of Program Director. This course introduces the student to the basic economic concepts and analytical methods used to understand, analyze, and evaluate economic aspects across various sectors of the healthcare system including clinics, underserved and rural populations, the role of government in the delivery of healthcare services, and the economic aspects of healthcare reform. The course applies tools of analysis to the behavior of households, healthcare providers, health insurance organizations, pharmaceutical industries, and not-for-profit and federally-funded clinics.

NURSE 7260 Program Evaluation and Quality Management in Healthcare: 3 semester hours
Prerequisites: Graduate standing. This course introduces students to the principles and procedures for assessing the quality and effectiveness of programs, projects, and materials related to planned interventions and systems changes in health settings. An overview is provided of past and current strategies to define and assess the quality of healthcare delivery using tools required to examine, evaluate, and implement the key structures and processes of quality improvement programs in healthcare organizations. Practical applications that prepare the participants to use the theory and techniques of quality improvement in situations with complex clinical and managerial implications will be incorporated.

NURSE 7291 DNP Capstone I: 2 semester hours
Prerequisites: NURSE 7215. This course provides opportunities for development of practice expertise into a systems-level approach to create change in a targeted population within a healthcare or related environment. Students will develop their clinical scholarship project proposal.

NURSE 7292 DNP Capstone II: 2 semester hours
Prerequisites: NURSE 7291. This course provides opportunities to develop strategies to create change in a targeted population and complex healthcare environments. Students will implement evidence-based, clinical scholarship projects to improve health outcomes.

NURSE 7293 DNP Capstone III: 2 semester hours
Prerequisites: NURSE 7282. This course provides opportunities for the development of practice expertise to create change in a targeted population and complex healthcare environment. Students will complete their clinical scholarship project and make recommendations for future practice.
NURSE 7299 DNP Seminar: 1-3 semester hours
Prerequisites: All DNP required course work or Consent of Instructor. This seminar provides students with the opportunity to synthesize and analyze knowledge within the context of the emerging DNP role. Analysis of practice issues may include reflective practice, collaboration, health systems technology, ethics and policy.

NURSE 7403 Development of the Nurse Scientist: 3 semester hours
Prerequisite: Admission to doctoral study in nursing. This course addresses the role of the PhD-prepared nurse as scientist, leader, academician, and policy maker. Students will analyze strategies for lifelong learning and development as nurse scientists and will explore avenues for building their programs of scholarship, funding opportunities, and contributing to nursing science in policy and clinical practice. Students will examine ways to collaborate effectively in order to improve health care and health outcomes.

NURSE 7443 Healthcare Policy and Economics: 3 semester hours
Prerequisites: Graduate admission. This course introduces the student to economic and healthcare policy concepts using analytical methods to understand and evaluate the impact across various sectors of the healthcare system. The historical context of healthcare policy is explored.

NURSE 7481 Development of Nursing Science and Theory: 3 semester hours
Prerequisite: Admission to PhD Program. This course focuses on the discipline of nursing, including the evolution of the state of scientific inquiry and knowledge development in nursing. The course includes the aims of nursing science, the nature of nursing knowledge and scientific theories, and a discussion of relationships among theory, research, method, and practice. Students engage in constructive dialogue as they begin to conceptualize nursing phenomena in their area of interest.

NURSE 7486 Research Residency: 3 semester hours
The course provides opportunities to apply research knowledge and skills in a directed research setting. This course will provide practical experience and the application of coursework to research as guided by faculty researchers.

NURSE 7488 Introduction to Qualitative Research Methodologies and Methods: 3 semester hours
Prerequisites: Admission to PhD program. This course introduces qualitative research methodologies and methods useful to healthcare and related sciences. Emphasis is placed on theoretical and philosophical perspectives, selection of appropriate methodologies, data collection and analysis methods, and critique. An overview of traditional and emerging designs, strengths and limitations of various methodologies, and ethical concerns will be addressed.

NURSE 7490 Advanced Nursing Research Designs and Methods: 3 semester hours
Prerequisite: Admission to the PhD program. This course focuses on development of the research plan including issues in sampling, design, and implementation nursing research. Students will evaluate research methods to answer research questions in their area of interest. Content includes design and analysis issues affecting validity, examination of measurement techniques for assessing validity, reliability, structure of data collection instruments, and criteria for instrument selection. A research proposal will be prepared.

NURSE 7491 Advanced Nursing Theory Development and Validation: 3 semester hours
Prerequisite: Admission to PhD program. This course focuses on a systematic study of contemporary nursing science and related theories in knowledge development, and the application of theory construction and validation strategies to specific nursing phenomena of interest. Students create and critically examine theoretical frameworks and models, with emphasis placed on constructing and testing theoretical statements.

NURSE 7495 Mixed Methods Research in Health Care: 3 semester hours
Prerequisites: NURSE 7490, NURSE 7488; or consent of the instructor. Emphasis will be on merging methods and addressing epistemological and paradigmatic issues. The value and use of the mixed methods approach, philosophical assumptions, types of designs, and approaches to designing and conducting mixed methods research in health care related disciplines will be emphasized.

NURSE 7496 Seminar in Advanced Qualitative Research Methods: 3 semester hours
Prerequisites: NURSE 7488 or consent of the instructor. This course focuses on developing skills in designing, delivering, and evaluating evidence-based health interventions that integrate relevant theoretical, research, social determinants, and biobehavioral variables with salient cultural variables for targeted groups. The course includes the application of research skills and empirical foundation for advanced research design and evaluation related to a focal area of research interest.

NURSE 7497 Design, Implementation and Evaluation of Health Interventions: 3 semester hours
Prerequisites: NURSE 7490 or consent of the instructor. This course focuses on developing skills in designing, delivering, and evaluating evidence-based health interventions that integrate relevant theoretical, research, social determinants, and biobehavioral variables with salient cultural variables for targeted groups. The course includes the application of research skills and empirical foundation for advanced research intervention design and evaluation related to a focal area of research interest.

NURSE 7498 Doctoral Seminar: 1-12 semester hours
Prerequisite: Consent of instructor. Presentation and discussion of pertinent methodological and clinical issues related to doctoral research.

NURSE 7499 Dissertation Research: 1-12 semester hours
Prerequisite: All required course work; successful completion of comprehensive examination. Investigation of an advanced nature culminating in successful defense of dissertation. Continuous registration is required.

NURSE 7529 Special Topics in Qualitative Systematic Reviews: 3 semester hours
Prerequisites: NURSE 7488 or equivalent. This course examines and carries out elements of qualitative systematic reviews, such as topic/problem identification, data collection, and analysis. Students will gain an understanding of how to limit threats to validity and maximize generalizability.
**NURSE 7530 Community Health and Infrastructure Assessment: 3 semester hours**
Prerequisites: Consent of the instructor and graduate standing. This course will introduce community health assessment and community infrastructure assessment. Participants will be introduced to the information and the resources available to secure and improve resilience in the community's healthcare and public health infrastructure. Participants will also be given an opportunity to work on a community-based health assessment project in conjunction with a community partner. Much of the experience will be practical and hands-on. Participants may be asked to work with a new project or join an ongoing project.

**NURSE 7870 Special Topics in Scientific Foundations of Research: 1-3 semester hours**
Prerequisites: Consent of the instructor and graduate standing. Explore special topics related to PhD dissertation. This course can be a cognate, elective, or for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).

**NURSE 7934 Leadership in Population Health and Healthcare Systems Residency III: 2-4 semester hours**
Prerequisites: Consent of the instructor and graduate standing. This clinical course provides continued precepted experiences that allow students to develop the leadership and population-focused role and clinical competencies within their specific emphasis area. Students integrate theory and clinical competencies to population preventative care, healthcare, health promotion, health education, health systems leadership, policy, and evidence-based care populations.

**NURSE 7954 Advanced Practice Nursing: Practicum II: 1-3 semester hours**
Prerequisites: NURSE 6955; may be taken concurrently with DNP Capstone. This clinical course provides continued precepted experiences that allow students to develop the leadership and population-focused role and clinical competencies within their specific emphasis area. Students integrate theory and clinical competencies to population preventative care, healthcare, health promotion, health education, health systems leadership, policy, and evidence-based care populations.

**NURSE 7955 Research Topics in Nursing and Health: Psychometrics: 3 semester hours**
Prerequisites: Admission to the College of Nursing PhD Program. This course focuses on theoretical foundations of measurement, item construction, instrument design, item analysis, validity and reliability assessment. Basic methodologies and techniques for constructing, testing, and evaluating instruments will be discussed. This course is for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).

**NURSE 7956 Participatory Approaches for Health and Health Systems: 3 semester hours**
Prerequisites: Admission to the College of Nursing PhD Program. This course will focus on the use of participatory approaches for the design of health and health-system interventions. This course is for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).

**NURSE 7957 Research Topics in Nursing and Health: Hierarchical Linear Modeling: 3 semester hours**
Prerequisites: Admission to the College of Nursing PhD Program. This course is an extension of regression methods to situations where data has multiple layers of meaningful structure. It emphasizes ability to specify, evaluate, and estimate a multilevel model using SPSS and HLM. This course is for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).

**NURSE 7958 Comparative Effectiveness Research: 3 semester hours**
Prerequisites: Admission to the College of Nursing PhD Program. This course provides evidence on the benefits and harms of treatment and prevention strategies, for which patients they work best, under which circumstances, and at what time. This advanced quantitative methods class presents a framework for analyzing observational studies and randomized trials for comparative effectiveness. This course is for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).

**NURSE 7959 Research Topics in Nursing & Health: Structural Equation Modeling: 3 semester hours**
Prerequisites: Admission to the College of Nursing PhD Program. This course focuses on factor analysis, path analysis, basic principles of model building, as well as applications and extensions of SEM such as scale construction and validation, mediation and moderation, multi-group analyses, and latent growth modeling. This course is for students who are enrolling in one of the shared courses available through the UM-funded CARMA initiative (Collaborations for Advanced Research Methods and Analysis).