Nurse Anesthesia

M.S. in Nurse Anesthesia (http://und-public.coursesleaf.com/graduateacademicinformation/departmentalcoursesprograms/nursing/nurseanesthesia/na-ms)

Courses

NURS 500. Theories/Concepts Nursing, 3 Credits.
The focus of this core course is on analysis of current nursing and related theories and concepts which guide clinical practice, curriculum development, research, and nursing administration.

NURS 502. Evidence for Practice, 3 Credits.
This course emphasizes the application of basic research concepts to the building of evidence-based practice in nursing. Advanced competencies are developed in searching and evaluating the literature, examining the merit of different types and levels of evidence, and analyzing the generalizability and implications for clinical practice. Prerequisites or Corequisites: Admission to one of the Graduate Nursing Tracks, NURS 500 and statistics and/or permission of instructor. F,S.

NURS 503. The Business of Practice, 2 Credits.
This course focuses on the business aspects of inter-professional advanced practice in the complex health care environment. Prerequisite: Admission to the DNP Program.

NURS 504. Advanced Pharmacology I, 3 Credits.
Pharmacodynamic and pharmacokinetic principles with a focus on clinical anesthesia practice. Physiologic systems and drug classifications are used; emphasis on therapeutic use, side effects, drug interactions, and contraindications of drugs used for intravenous anesthesia induction, inhalation, and balanced anesthesia maintenance. Pediatric and geriatric variations will be addressed. Prerequisite: Admission to Nurse Anesthesia Specialization.

NURS 505. Advanced Pharmacology, 3 Credits.
The focus of this course is on the basic and advanced clinical concepts of pharmacology for the advanced practice nurse. Medication selection and administration will be addressed. Anatomy, physiology, and pathophysiology will be reviewed as appropriate to the physiologic system or medication class being discussed. Evidence-based guidelines with respect to the clinical application of medications utilized in selected acute and chronic health problems will be explored. Prerequisite or Corequisite: Admission to Graduate Nursing Program. F.

NURS 506. Advanced Pharmacology II, 3 Credits.
Advanced pharmacology for clinical nurse anesthesia practice. Prerequisite: NURS 504.

NURS 507. Anesthesia Seminar and Clinical Practicum, 4 Credits.
This course is designed to provide nurse anesthesia students an overview of the basic principles and skills needed to care for the routine surgical patient. Topics include difficult airway management, patient monitoring, patient preparation, positioning, patient safety, fluid and electrolyte management, documentation of anesthesia care, and an introduction to regional anesthesia. Analysis, integration, and utilization of research to improve practice is emphasized. The lecture content is reinforced through Clinical Simulation and laboratory experiences, allowing for immediate application of the lecture content and integration into the clinical setting. Students are introduced to the clinical setting through observational and hands-on experiences. Includes a clinical and/or laboratory component. Prerequisite: NURS 521.

NURS 508. Nurse Anesthesia Review Course, 1 Credit.
This course is faculty guided and designed to assist students with their review of nurse anesthesia course and clinical material in preparation for the CCNA certification examination. Prerequisite: Completion of all Nurse Anesthesia Specialization coursework.

NURS 509. Foundations for Nurse Education, 3 Credits.
This course begins to compare and contrast multiple roles and responsibilities of nurse educators in various settings in academic and health service. It will build the conceptual foundation for educational processes with emphasis on ethics, learning theories, taxonomies of learning and current evidence necessary for development of competencies necessary for the practice of educating. Students will begin to formulate their individual philosophy of teaching and learning. Prerequisite: Admission to the Nursing Graduate Program or consent of the instructor. Prerequisite or Corequisite: NURS 500. S.

NURS 510. Adv Physiology/Pathophysiology I, 3 Credits.
Normal physiologic functions associated with cellular structure and environment. Physiologic and pathophysiologic functions of the human body and its organ systems, both separately and integrated in whole activities. Prerequisite: Admissions to graduate study.

NURS 511. Adv Physiology/Pathophys II, 3 Credits.
Physiologic and pathophysiologic functions of the human body and its organ systems, both separately and integrated in whole activities. Prerequisite: NURS 510 or consent of instructor.

NURS 512. DNP Core Concepts I, 2 Credits.
This course is an exploration of the core concepts that support the developing role of the DNP as a practice focused leader and researcher. Prerequisite: Admission to the DNP Program.

NURS 513. DNP Core Concepts II, 2 Credits.
This course focuses on the concepts that support the development of the role of the DNP practice leader in the care of rural and vulnerable populations and issues related to planning and providing care for vulnerable and underserved populations. The primary content focus areas are epidemiology and vulnerability related to population and individual health. Prerequisites: Admission to the DNP Program and NURS 512. S.

NURS 514. Essentials in Epidemiology, 3 Credits.
This course will emphasize the application of the principles of epidemiology as applied to the investigation and prevention of individual and population health problems. Students will evaluate care delivery models and analyze epidemiologic data to develop and apply strategies for health promotion and disease prevention for individuals, aggregates, and populations. The core competencies will focus not only on the practice of public health, but also enhance practice for the clinician. Prerequisite: Admission to the Graduate School, MPH Program, or permission of the the instructor. F,S.

NURS 515. Basic Principles of Anesthesia Practice I, 3 Credits.
This course provides an introduction to the fundamental principles necessary for the safe, professional, and individualized anesthetic care of diverse patients. Foundational concepts such as chemistry and physics as they apply to anesthesia practice, pharmacology of anesthetic agents, uncomplicated airway management, anesthesia delivery systems, and physiological monitoring will be investigated. Low and high fidelity patient simulation will be utilized to develop the student's cognitive and psychomotor skills which are essential to clinical anesthesia management. The course will conclude with a clinical component designed to acclimate beginning nurse anesthesia students to the clinical anesthesia arena. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. F.

NURS 516. Basic Principles of Anesthesia Practice II, 3 Credits.
This course builds upon the fundamentals covered in Basic Principles of Anesthesia I, all of which are necessary for the safe, professional, and individualized anesthetic care of diverse patients. Concepts such as basic perioperative anesthetic management, pain management, regional anesthesia, difficult airway management, effective oral and written communication, and patient and healthcare provider safety are emphasized. Low and high fidelity patient simulation will be utilized to develop the student's cognitive and psychomotor skills which are essential to clinical anesthesia management. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S.

NURS 517. Anesthesia Seminar and Clinical Practicum II, 5 Credits.
This course builds on the foundations learned in the prerequisite course. Advanced anesthesia principles are applied to various patient populations including the surgical patient with cardiovascular and respiratory diseases. Anesthesia care of other surgical populations including the trauma, orthopedic, urological, vascular, intra-abdominal and ENT patient will be explored. Important concepts include anatomical, physiological and pathophysiological, and pharmacological principles. Analysis, integration, and utilization of research to improve practice is emphasized. The lecture content is reinforced through simulated laboratory experiences, allowing for immediate application of the lecture content and integration into the clinical setting. A clinical rotation is included. Prerequisite: NURS 507.
NURS 518. Pharmacotherapeutics for Nurse Anesthesia. 2 Credits.
The focus of this course is on advanced clinical concepts of pharmacology relevant to the nurse anesthetist during the perioperative period. This course utilizes concepts from NURS 505 Advanced Pharmacology and further advances the student's knowledge in pharmacological concepts related to the practice of anesthesia. This course will examine the clinical application of anesthesia specific pharmacologic principles into formulating anesthetic plans for diverse patient populations. Prerequisite or Corequisite: NURS 505; Admission to the DNP Program - Nurse Anesthesia Track. S.

NURS 519. Practice Leadership. 2 Credits.
This course focuses on practice leadership theories and strategies related to the role of the DNP advanced practice nurse within the complex health care system. Prerequisite: Admission to DNP Program or consent of instructor.

NURS 520. Prof Role Dvlpmnt/Nurse Anesthesia. 3 Credits.
The focus of this course is on the identification and analysis of the professional components of nurse anesthesia practice, emphasizing role development; management and leadership; medical, ethical and legal responsibilities; the provision of culturally competent care; and scope of professional practice. Other areas that will be explored include quality improvement, the legislative process, credentialing, professional organizations, conflict resolution, and self-care and stress management for the anesthetist. An in-depth analysis of current trends and issues affecting healthcare and the delivery of anesthesia services are included in the course content. Prerequisites: NURS 521 and NURS 507. Corequisite: NURS 517.

NURS 521. Foundations of Anesthesia Practice. 3 Credits.
This course provides the foundation for nurse anesthesia practice. Lecture and discussion begin with an analysis of the history of anesthesia nursing, professionalism, and standards of care for the anesthesiologist. Safety in the nurse anesthesia environment will be emphasized. Additional content includes the applied chemical, physical, and biochemical concepts as they relate to anesthesia practice, including the mechanisms of anesthesia, medical mathematics, medical gas systems, laws governing gases, the anesthesia machine, monitoring principles and equipment, airway equipment and basic airway management, and universal precautions. Prerequisite: Admission to the Nurse Anesthesia Specialization.

NURS 522. Advanced Pathophysiology. 3 Credits.
This course presents a system-focused approach to alterations in normal physiological mechanisms that result in pathologic disease processes. Physiological changes are compared and contrasted over the lifespan and developmental cellular physiology, pathogenesis and clinical manifestations commonly observed in altered health states are reviewed. This knowledge serves as the foundation for advanced clinical assessment, decision making and management for the advanced practice nurse. Prerequisite: Admission to graduate study. F, S, SS.

NURS 523. Health Promotion. 3 Credits.
Paradigms in health promotion, health detection, and disease prevention across the lifespan are used in synthesis in theory and evidence-based primary care interventions. Prerequisite: Admission to the Nursing Graduate Program or consent of the instructor. F, S.

NURS 524. Anatomy for Nurse Anesthetists. 1 Credit.
This course builds upon the concepts and fundamentals of Basic Principles of Anesthesia I and II as it relates to the detailed regional anatomy of the human body. A cadaver laboratory experience will be utilized throughout the course to develop the student's understanding of clinical anatomy related to the airway, central nervous system, peripheral nerves, cardiovascular system, and pulmonary system with an anesthesia context. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S.

NURS 525. Applied Multivariate Statistics. 3 Credits.
Principles, assumptions and applications of major multivariate statistical techniques commonly used in nursing and clinical health research. Prerequisite: Graduate level univariate statistics and admission to the Nursing Doctoral Program or consent of the instructor. F.

NURS 526. Ethical, Legal and Health Policy Issues. 3 Credits.
This course emphasizes health policy issues within the context of legal and ethical concepts. Students will examine and debate health policies in current practice, thus broadening their ability to analyze, implement, and evaluate health policy issues.

NURS 527. Anesthesia Seminar and Clinical Practicum Ill. 5 Credits.
This course further builds on the foundations learned in prerequisite courses. Students will incorporate previously learned anatomy, physiology, pathophysiology, and patient management into the care of subspecialty patients and patients with complex co-existing diseases. Advanced anesthesia principles are applied to the OB, pediatric, geriatric, and neuro patient. The pharmacology and anesthesia management of these subspecialty populations and patients with various disease states, such as kidney, musculoskeletal, and endocrine disorders, will be explored. Analysis, integration, and utilization of research to improve clinical practice is emphasized. The lecture content is reinforced with a clinical experience that emphasizes anesthesia care for subspecialty populations. A clinical/laboratory component is included. Prerequisite: NUR 517.

NURS 528. Advanced Principles of Anesthesia Practice I. 4 Credits.
This course builds upon the nurse anesthesia foundations covered previously in the Basic Principles of Anesthesia I and II courses. An evidence based approach to the anesthetic evaluation, planning, and management of diverse and increasingly complex patient populations, such as those with pre-existing respiratory, cardiac, and renal diseases, will be the focus. The hands-on administration of safe, individualized, and comprehensive anesthetic plans of care to both simulated and actual patients will be introduced and emphasized. Low and high fidelity patient simulation will be utilized to continue developing the students' cognitive and psychomotor skills which are essential to perform clinical anesthesia management. A clinical component will allow the student to apply theoretical principles to nurse anesthesia practice and to increase their clinical skills, knowledge, and autonomy. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. SS.

NURS 529. Advanced Principles of Anesthesia Practice II. 6 Credits.
This course builds on the foundations covered in Basic Principles of Anesthesia I and II along with Advanced Principles I including the evaluation, planning, and management of diverse and increasingly complex patient populations. Evidence-based advanced principles of anesthesia care will be investigated in order to construct and implement comprehensive and individualized anesthetic plans of care for the management of subspecialty patients. Obstetrical and pediatric populations, as well as patients with complex co-existing diseases and/or those undergoing complex surgical procedures will be the focus. Low and high fidelity patient simulation will be utilized to continue developing the student's cognitive and psychomotor skills which are essential to perform clinical anesthesia management. A clinical component will allow the student to apply theoretical principles to nurse anesthesia practice and to increase their clinical skills, knowledge, and autonomy. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. F.

NURS 530. Research Design & Methods in Nursing. 3 Credits.
Prerequisite or corequisite: NURS 500 or consent of instructor.

NURS 531. Adult-Gerontology Illness Management I. 3 Credits.
This is the first of a two-course sequence that focuses on evidenced-based primary care diagnosis and management of common episodic/chronic problems encountered by young adults, adults and older adults and their social network in ambulatory, inpatient, and community settings. Physiological, psychosocial, and pharmacological interventions are integrated into the holistic care that incorporates age-related, cultural, family, and community variations. An on-campus intensive is required for this course. Prerequisites: NURS 511 and NURS 585. Corequisite: NURS 597. F.

NURS 532. Family Centered Advanced Practice Nursing. 3 Credits.
Theoretical and scientific foundations for advanced practice nursing care for the family-as-a-unit in health and illness across the lifespan. Prerequisite: Admission to DNP program or consent of instructor. S.

NURS 533. Adult-Gerontology Illness Management II. 3 Credits.
This is the second of a two-course sequence that focuses on evidenced-based primary care diagnosis and management of common episodic/chronic problems encountered by young adults, adults and older adults and their social network in ambulatory, inpatient, and community settings. Physiological, psychosocial, and pharmacological interventions are integrated into the holistic care that incorporates age-related, cultural, family, and community variations. An on-campus intensive is required for this course. Prerequisite: NURS 531. Corequisite: NURS 597. S.
NURS 534. Management of Health Conditions in Primary Care I. 3 Credits.
This is the first of a two-course sequence that focuses on evidenced-based primary care diagnosis and management of common episodic/chronic problems encountered by adults, including young adults, middle aged adults and older adults and their social network in ambulatory, inpatient, and community settings. Physiological, psychosocial, and pharmacological interventions are integrated into the holistic care that incorporates age-related, cultural, family, and community variations. Prerequisites: NURS 522 and NURS 585. Corequisite: NURS 597 (II). F,S,SS.

NURS 535. Advanced Pharmacology for Primary Care I. 2 Credits.
Pharmacological agents utilized to treat common acute and chronic health problems are explored in depth. The course focus is on advanced nurse practice roles related to prescription, pharmacological, and therapeutic applications of the drugs. Prerequisite: Admission to the Nursing Graduate Program or consent of the instructor. Prerequisite or corequisite: NURS 510. F,S.

NURS 536. Advanced Nurse Educator Practice of Health Promotion. 2 Credits.
This practicum course affords the Nurse Educator student with opportunities to develop advanced skills in teaching-learning practices in the rural health care environment. The student will apply educational theories and best-evidence teaching strategies with a particular emphasis in education related to health promotion strategies. This course will include topics such as the Nurse Educator role to promote health in rural communities, assess health literacy, and develop appropriate patient educational materials. The practicum emphasizes health promotion education to meet diverse needs of rural dwelling patients, families and groups. Prerequisites: NURS 500, NURS 511, NURS 539, and NURS 514. Corequisite: NURS 526, and NURS 569. F.

NURS 537. Graduate Cooperative Education. 1-2 Credits.
The course focus is upon experience in advanced nursing practice integrating theory, research, and advanced practice in a specific area of nursing. Course overview: the purpose of this course is to provide the graduate nursing student with advanced nursing practice as an employee in a health care agency and to evaluate that experience in relation to the educational program. A clinical/laboratory component is included. Prerequisite: Permission of Graduate Director of Nursing. Repeatable to 9 credits.

NURS 538. Psych Diagnostic Reasoning. 2 Credits.
This course prepares students for advanced therapeutic communication, interviewing, and assessment of people with mental illness across the life span. Skills are developed in differential diagnoses of psychopathology within the scope and standards of advanced psychiatric mental health nursing practice. Clinical application is included. Prerequisite: Acceptance into the PMHNP program or permission of instructor. S.

NURS 539. Advanced Pharmacology for Primary Care II. 2 Credits.
Pharmacological agents utilized to treat common acute and chronic health problems are explored in depth. The course focus is on advanced nurse practice roles related to prescription, pharmacological, and therapeutic applications of the drugs. Prerequisite: Admission to nursing graduate program and NURS 535 or consent of instructor. F,S.

NURS 540. Management of Health Conditions in Primary Care II. 3 Credits.
Clinical decision making skills are developed in the diagnosis and management of acute and chronic health conditions throughout the lifespan. Health promotion, health protection, and disease prevention are emphasized. Prerequisite: NURS 534. F,S,SS.

NURS 541. Illness Management - Adult Gerontology I. 3 Credits.
This is the first of a two-course sequence focusing on evidence-based primary care specific to the adult-gerontology population which includes adolescents, young adults and frail, older adults. This course prepares students to provide healthcare services across the adult-gerontology age spectrum from wellness to illness, using scientific knowledge and theoretical foundations to differentiate between normal and abnormal changes in physiological, psychological and sociological development and aging. Students will develop strategic approaches to provide and coordinate interdisciplinary and holistic care that incorporates age-related, cultural, family, and community variations. Prerequisites: NURS 522, NURS 585, and NURS 597 (I). Corequisite: NURS 597 (II). F,S,SS.

NURS 542. Professional Aspects of Nurse Anesthesia Practice. 3 Credits.
This course provides the entry-level nurse anesthesia student with a foundational knowledge of professional aspects related to nurse anesthesia practice. The focus of this course is on historical perspectives, professional role development, anesthesia business practices, and professional wellness. Prerequisite: Admission to the DNP Program - Nurse Anesthesia Track. F.

NURS 543. Illness Management - Adult Gerontology II. 3 Credits.
This is the second of a two-course sequence that focuses on evidence based primary care specific to the adult-gerontology populations which includes adolescents and young adults to frail, older adults. Course work focuses on evidence based acute and chronic care diagnosis and management of common episodic acute and chronic problems encountered by the adult-gerontology population. Physiological, psychosocial, and pharmacological assessments, including changes associated with aging and development across the adolescent - adult continuum are integrated into the formation of differential diagnosis and interventions of clinical problems in collaboration with other care providers. Prerequisites: NURS 541 and NURS 597 (II). Corequisite: NURS 597 (III). F,S,SS.

NURS 544. Pharmacotherapeutics for Primary Care. 2 Credits.
This course will help prepare the advance practice nursing student for prescriptive authority. Topics will focus on decision making regarding the pharmacological management of common acute and chronic illnesses encountered in primary care settings. Pharmacokinetics, pharmacodynamics, adverse drug reactions, and contraindications will be discussed. Ethical and legal principles of writing prescriptions will also be covered. Students will synthesize research findings related to various medications using case study and discussion. Prerequisites: Admission to DNP program (FNP, AGNP tracks), and NURS 505. S.

NURS 545. Care of the Frail Older Adult. 3 Credits.
In this course the advanced practice nursing student will focus on the complex and multifactorial health care needs of frail elders. Students will develop strategies to provide and coordinate interdisciplinary and holistic care of the frail elderly in a variety of settings. Prerequisite: Admission to DNP program or consent of instructor. S.

NURS 546. Advanced PHN I. 4 Credits.
NURS 546 introduces concepts foundational to advanced PHN practice and population health. Corequisite: NURS 547.

NURS 547. Advanced PHN Practicum I. 4 Credits.
The focus of this course is on application of foundational concepts of Advanced PHN practice. Students will conduct a community assessment and identify community problems and strengths. Written and oral communication skills are emphasized. Corequisite: NURS 546.

NURS 548. Advanced PHN II. 3 Credits.
This course focuses on the leadership role of advanced PHN practice. Public health and community-based organizational assessment, program monitoring and evaluation, quality improvement, and management of multiple projects are emphasized. Concepts of leadership in public and community health and collaborative interdisciplinary practice are discussed. Health policy and law and ethics as they relate to public health are explored. In addition, advanced PHN leadership in rural areas and in disaster/emergency preparedness and management are discussed. Prerequisites: NURS 502, NURS 546, and NURS 547. Corequisite: NURS 549.

NURS 549. Advanced PHN Practicum II. 3 Credits.
This course focuses on implementation of advanced PHN interventions. Corequisite: NURS 548.

NURS 550. Global Public Health Issues. 2 Credits.
This course focuses on population health issues at a global level. Differences in population health status between developing and developed countries are explored. Special emphasis is placed on war as a public health issue and the global impact of AIDS.

NURS 552. Role Development of the CNS. 2 Credits.
Students will compare and contrast the various roles of the clinical nurse specialist and evaluate those roles as they relate to their individual area of practice. Concepts of professional development are emphasized. Prerequisite: NURS 502.

NURS 553. Role Development of the NP. 2 Credits.
This course emphasizes professional role development of the nurse practitioner. Students will compare and contrast the various roles of the nurse practitioner and evaluate those roles as they relate to the student's individual planned area of practice. Prerequisite: NURS 502.

NURS 554. Writing for Publication. 2 Credits.
The course is designed to provide students with knowledge and skills necessary to meet the PhD program requirement and milestone of preparing and submitting a manuscript for publication in a peer-reviewed journal. The achievement of this milestone is foundational for scientific inquiry and the development of nurse scientists. Prerequisite: Consent of Instructor or Advisor. S/U grading. F,S,SS.
NURS 555. Grant Submission. 2 Credits. 
The course results in the development and submission of a pre-doctoral, federally-funded research grant proposal, or equivalent with advisor approval. The course builds upon previous doctoral coursework covering grantsmanship and issues in preparing funded research proposals and grant budgets. Prerequisites: NURS 573 and consent of Instructor or Advisor. F,S,SS.

NURS 556. PhD Student Intensive. 1 Credit. 
This course submerges the student into a community of scholars during an annual on-campus intensive experience. The student will participate in a variety of presentations, workshops, and activities which focus on development into the role of a nurse scientist and scholar. The course uses a variety of activities which help the student develop into the role of a nurse scientist and scholar. Prerequisite: Admission to the Nursing PhD program. Repeatable to 5 credits. S/U grading. F,S.

NURS 557. Foundations of Nursing Science. 3 Credits. 
The epistemology and philosophy of nursing as an art and a science are examined. Patterns of knowing as well as clinical, conceptual, and empirical types of nursing knowledge will be discussed. The development of theory as a knowledge claim is analyzed. Prerequisites: Masters Level Nursing Theory Course and Admission to PhD Program. S.

NURS 558. Research Design. 3 Credits. 
This course prepares the doctoral student to understand the link between research design and the study purpose. Prerequisite: Admission to PhD program or consent of instructor. F.

NURS 559. Maternal and Child Health in Primary Care. 2 Credits. 
This course focuses on advanced practice nursing care of obstetric and pediatric clients within a primary care setting. An on-campus intensive is required for this course. Prerequisites: Admission to FNP, NURS 510, NURS 511, NURS 523, and NURS 585. SS.

NURS 560. Clinical Anesthesia Practicum I. 5 Credits. 
This is the first of five clinical practicum courses that build upon one another and provides students the opportunity to obtain the clinical experiences necessary to develop increasing proficiency in nurse anesthesia practice. The emphasis of this course is the integration of current evidence and advanced nursing knowledge with decision making and case management for diverse, but less complex, patient populations receiving anesthesia care. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S/U grading. S.

NURS 561. Clinical Anesthesia Practicum II. 3 Credits. 
This is the second of five clinical practicum courses designed to provide the student with the opportunity to obtain clinical experiences necessary to develop increasing proficiency in nurse anesthesia practice. The emphasis of this course is the integration of current evidence and advanced nursing knowledge with decision making and case management for diverse, but increasingly complex patient populations receiving anesthesia care. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S/U grading. S.

NURS 562. Clinical Anesthesia Practicum III. 4 Credits. 
This is the third of five clinical practicum courses that provides the student with the opportunity to obtain clinical experiences necessary to develop increasing proficiency in nurse anesthesia practice. The emphasis of this course is the integration of current evidence and advanced nursing knowledge with decision making and case management for the diverse, increasingly complex, patient populations receiving anesthesia care. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S/U grading. SS.

NURS 563. Clinical Anesthesia Practicum IV. 6 Credits. 
This is the fourth of five clinical practicum courses that provides the student with the opportunity to obtain clinical experiences necessary to develop increasing proficiency in nurse anesthesia practice. The emphasis of this course is the integration of current evidence and advanced nursing knowledge with decision making and case management for diverse patient populations, of all acuity levels, receiving anesthesia care. Emphasis will also be placed on student autonomy, continuing professional role development, and leadership skills. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S/U grading. S.

NURS 564. Psychopharmacology. 2 Credits. 
This course provides the advanced practice student with knowledge in the pharmacology of psychopathology across the life span. Emphasis will be placed on the appropriate use of pharmaceuticals for psychiatric disabilities/disorders including: Mood disorders, development disorders, psychotic disorders, anxiety disorders, dementia, and substance abuse. Prerequisite: Admission to PMHN program or permission of instructor. S.

NURS 565. Rural Populations and Rural Health. 3 Credits. 
This course provides an overview of characteristics of rural populations and rural health. Factors that contribute to health, morbidity, and mortality are examined, and the compounded vulnerability of rurality and disadvantaged groups is analyzed. Prerequisite: A graduate level Epidemiology course or permission of instructor. S.

NURS 566. Curriculum Development. 3 Credits. 
This course focuses on the curriculum development process. Societal, professional, and institutional factors as well as current research findings influencing the curriculum development process are analyzed. Consideration of the impact of adult learning principles, workforce issues, legal-ethical concerns, and diverse student populations in regard to the curriculum development process is given. Prerequisite: NURS 555.

NURS 567. Teaching Methodologies. 3 Credits. 
The course explores theory-based teaching strategies designed to develop cognitive abilities, psychomotor skills, and affective qualities in learners from diverse backgrounds. Strategies and methods for the teaching of nursing content in a variety of settings are utilized. The use of technological tools in nursing education is evaluated. Prerequisite or corequisite: NURS 566.

NURS 568. Teaching Practicum. 2 Credits. 
Students assume the role of the nurse educator in selected learning settings under the guidance of a preceptor. A clinical/laboratory component is included. Prerequisites: NURS 566 and NURS 567 and NURS 569, or consent of instructor.

NURS 569. Assessment and Evaluation. 3 Credits. 
Principles of assessment, measurement, and evaluation are analyzed in this course as they relate to nursing education. The processes of assessing student learning, teaching, and program outcomes are explored. Topics relevant to the evaluation of individual student learning such as test development, evaluation of critical thinking, and clinical evaluation are included. The processes of faculty and program evaluation are examined. Prerequisites: NURS 566 and NURS 567, or consent of instructor.

NURS 570. Diverse Vulnerable Populations. 3 Credits. 
Students will explore a wide range of concepts as they apply to diverse and vulnerable populations. The focus of the course is on understanding concepts and principles important to nursing when doing research, planning health care, developing health policy, and teaching in this area. Prerequisite: Admission to the Nursing Graduate Program or consent of the instructor.

NURS 571. Research Funding. 3 Credits. 
This course integrates the scientific and practical aspects of professional writing and grant proposal development to obtain funds for research. Prerequisite: Admission to the graduate nursing program or approval of instructor. Prerequisite or Corequisite: NURS 574 and/or NURS 575; Non-nursing programs: Graduate level quantitative and/or qualitative research methods coursework required. F.

NURS 574. Quantitative Nursing Methods. 3 Credits. 
The purpose of this course is to acquire knowledge and skills necessary to apply quantitative research methods in nursing. The course includes substantial applications of established methodologies and effective research techniques within the quantitative paradigm. Prerequisite: Admission to the doctoral program and completion of a multivariate statistics course. S.

NURS 575. Qualitative Nursing Research. 3 Credits. 
This course focuses on examination and analysis of qualitative research designs with particular emphasis on approaches relevant to phenomena in nursing. Students will conduct fieldwork to develop some beginning qualitative research skills. Prerequisite or Corequisite: Admission to Doctoral Program or consent of instructor. F.
NURS 576. Clinical Anesthesia Practicum V. 5 Credits.
This is the final capstone clinical practicum course that provides the student with the opportunity to develop full autonomy and proficiency in nurse anesthesia practice. The emphasis of this course is the integration of current evidence and advanced nursing knowledge with advanced clinical judgement, well-developed clinical decision making, and total case management for diverse patient populations receiving anesthesia care. Professionalism and leadership within healthcare systems will be emphasized. Prerequisite or Corequisite: Admission to the DNP Program - Nurse Anesthesia Track. S/U grading. SS.

NURS 577. Rural Healthcare Ethics. 3 Credits.
This course is directed toward the development of critical dialogue and leadership strategies for dealing with ethical issues related to nursing, health care and research. Commitment to discussion, understanding and acceptance of the rights of others in dilemmas is emphasized. Reflexive nursing, which brings attention to one's own position and objectivity, is encouraged. The challenges of ethics in rural milieux are included in the discourse. Prerequisite: Admission to the Nursing doctoral Program or consent of the instructor. S.

NURS 578. Doctoral Seminar. 1 Credit.
Prerequisite: Admission to the Nursing doctoral Program or consent of the instructor.

NURS 580. Research Practicum. 1-6 Credits.
The doctoral research practicum provides a research experience for doctoral nursing students separate from the dissertation to participate in the research process under the guidance of an experienced/funded investigator. Experiences may include grant writing, data collection, analysis, and manuscript writing. Repeatable to 6 credits. F,S,SS.

NURS 581. The Nurse Scientist. 3 Credits.
This course prepares the doctoral student to actively engage in doctoral study with knowledge of the discipline of nursing and skills that facilitate success as an emerging nurse scientist. Prerequisite: Admission to PhD program. F.

NURS 583. Individual Therapy. 2 Credits.
This course provides knowledge and skill development in the implementation of evidence-based clinical therapies and treatments focused on the individual including cultural variations. Includes clinical practice. Prerequisites or corequisites: NURS 500, NURS 502, NURS 510, NURS 511, NURS 514, NURS 523, NURS 535, NURS 538, NURS 539, and NURS 585.

NURS 584. Group and Family Therapies. 3 Credits.
Evidence-based clinical interventions with diverse groups and families are presented. Opportunities for clinical implementation accompany the theoretical models. A clinical/laboratory component is included. Prerequisites or corequisites: NURS 538, NURS 583 and admission into Psychiatric Mental Health specialization or consent of instructor.

NURS 585. Advanced Health Assessment. 3 Credits.
An evidenced-based approach will be used to present methodologies for graduate student performance on health histories, developmental assessments, and physical/psychosocial assessments of individuals. Communication and interviewing techniques for advanced nursing practice are applied. A clinical/laboratory component is included with variations for Family Nurse Practitioner, Psych/Mental Health, Adult-Gerontology, and Nurse Anesthesia students. An on-campus intensive is required for this course. Prerequisite: Completion of an undergraduate course in health assessment techniques or consent of instructor. Prerequisite or corequisite: NURS 510. F.S.

NURS 586. Rural Health Programs and Research. 3 Credits.
This course focuses on policies, programs and research related to rural health. Prerequisite: NURS 565 and NURS 558 or consent of instructor. F.

NURS 588. Management of Psychopathology I. 2 Credits.
This is the first of a two course sequence that focuses on the management of individuals across the lifespan, groups and families with or affected by psychopathology. Continuity of care across settings and community are emphasized. Prerequisites or Corequisites: NURS 564, NURS 584, and admission to the PMHNPP program.

NURS 589. Management of Psychopathology II. 2 Credits.
This is the second of a two course sequence that focuses on the management of individuals across the lifespan, groups and families with or affected by psychopathology. Management of co-morbidities is emphasized. Prerequisite or Corequisite: NURS 588. S.

NURS 590. Directed Studies. 1-3 Credits.
Designed to meet the needs of individual and/or small groups of graduate students. The course content will be based on student interests and needs in conjunction with the faculty member's area of specialization. Prerequisite: Consent of instructor. Repeatable.

NURS 591. Readings in Nursing. 1-3 Credits.
Readings in selected nursing/health care topics with written and/or oral reports. Prerequisite: Consent of instructor. Repeatable.

NURS 592. Advanced PHN Practicum III. 4 Credits.
This course provides a capstone experience in Advanced PHN practice. Students are expected to integrate knowledge from all of their previous coursework into an applied practicum experience in population health, to evaluate population health interventions and programs, and develop strategies for program funding. Prerequisites: NURS 549 and NURS 549.

NURS 593. DNP Internship I. 4 Credits.
This first DNA Internship course is designed to provide the DNA Advanced Practice Nurse (APN) student with opportunities to apply the concepts in the AACN DNA Essentials document in the practice environment. Students will also begin development of the DNA capstone project. Corequisite: NURS 598.

NURS 594. DNP Internship II. 4 Credits.
This course is designed to provide the DNP student with additional practice focused learning opportunities to apply the concepts in the AACN DNP Essentials document in the practice environment. The student will complete and disseminate findings from the capstone project. Prerequisite: NURS 593. Corequisite: NURS 599.

NURS 595. DNP Internship III. 4 Credits.
This course is designed to provide the DNP APN with additional practice focused learning opportunities to apply the concepts in the AACN DNP Essentials document in the practice environment. The student will complete the DNP capstone project and disseminate findings in presentations and publications. Prerequisites: NURS 593 and NURS 594. Corequisite: NURS 596.

NURS 597. Advanced Clinical Practicum. 1-12 Credits.
This clinical practicum course provides the student with the opportunity to obtain extended clinical experience in the area of specialization. The course focuses on the integration of theoretical knowledge into clinical practice. A clinical/laboratory component is included. Prerequisite: Completion of NURS 517 for Nurse Anesthesia specialization or completion of first year curriculum for the Family Nurse Practitioner, Psychiatric/Mental Health or Gerontology specializations. Repeatable. S/U grading.

NURS 600. Integrated DNP Core Concepts I. 3 Credits.
This course is an exploration of the core concepts that support the varying roles of the DNP prepared APRN as a practice focused leader and clinical scholar. Development of practice focused leadership skills in the care of rural and vulnerable populations will also be addressed. Prerequisite: Admission to the DNP Program. F.

NURS 601. Integrated DNP Core Concepts II. 3 Credits.
This course builds upon content covered in Integrated DNP Core Concepts I. Students continue to explore core concepts that support the varying roles of the role of the DNP prepared APRN practice focused leader and clinical scholar. In addition, students will critically examine the historical evolution of epidemiology and epidemiological concepts relevant in advanced nursing practice. Prerequisites: Admission to the DNP Program and NURS 600. S.

NURS 602. Evidence Based Research I. 3 Credits.
This course focuses on the development of practice scholarship through the use of evidence to address clinical problems and inform future practice. Students in the class will define practice problems, evaluate evidence based methods to address those problems and design practice focused projects to measure outcomes. Middle range theories will also be explored and used as frameworks for study designs. Statistics and previous Evidence Based Practice course is highly recommended. Prerequisite or Corequisite: Admission to the DNP Program. F.

NURS 603. Evidence-Based Research II. 3 Credits.
This course focuses on the continued development of the practice scholar and includes content of research and program evaluation methods and analysis used to address practice problems and inform future evidence based practice. Prerequisite: NURS 602. Corequisite: NURS 609. S.

NURS 604. Health Informatics. 3 Credits.
This course prepares the health care practice professional to use and evaluate emerging health care technology and data systems to support evidence-based practice. Prerequisite: Admission to DNP Program or consent of instructor. SS.
NURS 605. Health Policy. 2 Credits.
This course will prepare the health care professional to understand and apply knowledge of health policy to function as an advocate for populations and individuals. Prerequisite: Admission to the DNP Program or consent of instructor. SS.

NURS 606. DNP Systems Focused Practice I. 2 Credits.
This course is designed to provide the DNP student with opportunities to apply the concepts in the AACN DNP Essentials in the practice environment. Prerequisite: NURS 603. SS.

NURS 607. DNP Systems Focused Practice II. 3 Credits.
This course continues to provide the DNP student with opportunities to apply the concepts in the AACN DNP Essentials in the practice environment. Prerequisites: NURS 603 and NURS 606. F.

NURS 608. Healthcare Economics, Finance and Leadership. 3 Credits.
This course focuses on healthcare economics, finance and practice leadership skills related to the role of the DNP prepared advanced practice nurse within the complex health care system. Prerequisite or Corequisite: Admission to the DNP program or consent of instructor. F.

NURS 609. DNP Project Teams. 1-6 Credits.
The student will design, implement and evaluate the DNP project as well as present findings in the applicable practice setting under the guidance of DNP faculty. Prerequisite: NURS 603. Repeatable to 6 credits. F,S,SS.

NURS 610. DNP Capstone. 2 Credits.
The capstone course provides the DNP students with an opportunity to develop skills in reporting and disseminating practice focused research findings. Writing for publication of practice focused research is emphasized. Prerequisite or Corequisite: NURS 609. S,SS.

NURS 611. Rural Healthcare Forum. 1 Credit.
This course focuses on interprofessional healthcare delivery to rural and underserved populations. Prerequisite or Corequisite: Admission to DNP program or consent of instructor. SS.

NURS 996. Continuing Enrollment. 1-12 Credits.
Repeatable. S/U grading.

NURS 997. Independent Study. 2 Credits.

NURS 998. Thesis. 1-4 Credits.
Repeatable to 4 credits.

NURS 999. Dissertation. 1-15 Credits.
Repeatable to 15 credits.