NR (NURSING)

Courses NR.100

NR.100.100. English for Academic Purposes. 0 - 1 Credits. Under development

NR.110

NR.110.562. Advanced Practice in Acute Care I. 4 Credits.

This course fosters clinical competency and emphasizes evidencebased practice in adult acute/critical and chronic healthcare settings. It emphasizes the integration of theory, assessment and advanced therapeutics for adults and frail elders in high acuity patient settings. Students will perform comprehensive clinical assessment including appropriate diagnostic and therapeutic testing. Management of acute and chronic health problems will be accomplished with the direction of clinical preceptors. Clinical placements are arranged by faculty and will include placement in one of a variety of acute/critical care areas including, but not limited to: CCU, MICU, SICU, ED, intermediate care, and specialty services such as transplant and oncology. Gerontology experiences in complex long term care, rehabilitation and/or inpatient units specializing in the acute care of elders will also be provided. At weekly seminars, currently recommended diagnostic and treatment regimens will be discussed in a lecture and case study format. Information presented will focus on pathophysiology, subjective and objective clinical data including physical examination, laboratory and diagnostic test results, differential diagnosis and development of a management plan within the scope of Adult-Gerontology ACNP practice. 250 clinical hours. Pre/corequisites: NR.110.508, 110.547, 110.549, 110.572

Prerequisite(s): NR.110.549 is a prerequisite for this course.

NR.110.572. Advanced Diagnostics and Therapeutics. 2 Credits.

This clinical course introduces students to the role and scope of practice for Adult Gerontology – Acute Care Nurse Practitioners. Methods of advanced assessment and treatment modalities utilized with acutely and critically ill adults and elders are discussed. Content includes nutritional support, fluid and electrolyte replacement, transfusion medicine, hemodynamic monitoring, and mechanical ventilation. Analysis of relevant laboratory and advanced cardiopulmonary assessment data is included. Laboratory practice is provided for procedures such as suturing, intubation and line insertion, as well as application of other invasive therapeutic and diagnostic devices. Corequisites: NR.110.547 and 110.549

NR.110.663. Advanced Practice Nursing: Case Studies in Acute Care Nursing. 3 - 5 Credits.

See NR110.562 for description. Course available to Accelerated Postmasters ACNP students only. 125-270 clinical hours.

NR.120

NR.120.501. Professionalism for Nursing in Health Care. 3 Credits.

This course focuses on professional role development in nursing and health care. Content isorganized into seven modules: 1) Local to global health care; 2) Ethics; 3) Interprofessionaleducation; 4) Leadership principles; 5) Health care delivery system; 6) Quality and safety; 7)Professional roles in nursing. The course content will address health disparities,interprofessional communication, teams and teamwork, values, ethics, principles of leadership,and professional roles within both interprofessional and nursing teams. Students will beintroduced to healthcare delivery concepts, such as healthcare delivery systems and healthcare policy and financing. Finally, students will develop their nursing practice by acquiring a basic understanding of healthcare competencies through two frameworks, the IOM competencies for health care professionals and the Quality and Safety Education in Nursing (QSEN) competencies.Pre/corequisites: NR.120.502, NR.120.503, NR.120.504, NR.120.505.

Corequisite(s): NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.505[C]

NR.120.502. Foundations of Nursing Practice. 3 Credits.

This course addresses the knowledge and skills needed to provide safe and effective care to patients. Students will explore scientific principles related to nursing interventions and will practice psychomotor skills needed to safely and effectively implement those interventions. Knowledge, skills and attitudes based on QSEN competencies, including person centered care, use of evidence based guidelines, quality improvement, safety and informatics will be incorporated into lab practice and Master's Program Outcomes.Pre/corequisites: NR.120.501, NR.120.503, NR.120.504, NR.120.505.

Corequisite(s): NR.120.501[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C]

NR.120.503. Health Assessment I. 3 Credits.

This course provides students with the basic skills to complete a comprehensive health assessment including the physical, psychological, and social aspects of health to support person-centered care. Integrated in this assessment is the collection and analysis of data which are essential in planning safe and effective patient care. Lectures are designed to help the students apply their knowledge of health assessment to both primary and acute care settings. Emphasis is placed on gathering reliable and relevant information; recognizing variations of normal findings; and identifying abnormal findings using common health problems as exemplars.Pre/corequisites: NR.120.501, NR.120.502, NR.120.504, NR.120.505

Corequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C]

NR.120.504. Pathophysiology I. 3 Credits.

This course presents basic knowledge of the interrelationship between normal physiology and pathophysiology across the lifespan as applicable to current nursing practice. Selected major health problems are explored, including clinical manifestations and the pathophysiology. Weekly lecture/discussions are organized based on systems and cover topics from the cellular to major organ systems. Clinical courses will provide a clinical opportunity to apply this content.Pre/corequisites: NR.120.501, NR.120.502, NR.120.503, NR.120.505.

Corequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.505[C] AND NR.120.537[C]

NR.120.505. Integrated Clinical Management: Common Health Alterations. 4 Credits.

This combined clinical and theory course introduces nursing basic concepts and frameworks (communication, safety, organization and nursing process). Additionally, this course will also introduce common conditions found in healthcare. Students practice competencies in communication, assessment, nursing interventions, and documentation in a variety of basic acute care clinical settings. Simulation is incorporated as an adjunct to the clinical experience. 112 clinical hoursPre/corequisites: NR.120.501, NR.120.502, NR.120.503, NR.120.504 Corequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.507[C]

NR.120.507. Pharmacology. 3 Credits.

The theoretical course, Pharmacology, provides nurses in general practice with an understanding of core drug knowledge including pharmacotherapeutics, pharmacokinetics, pharmacodynamics, contraindications and precautions, adverse effects, and drug interactions. Sources of individual variation in drug response are presented in relation to drug therapy, and include: health status, lifespan and gender, lifestyle, diet, and habits, environment, and culture and inherited traits. Major drug classifications and prototype drugs are presented in a standardized format that includes discussion of pharmacology principles, medication safety issues, nursing implication of drug therapy, as well as, review in relation to patient case scenarios. The nursing process, which is essential for the nursing management of drug therapy, is emphasized, allowing students to apply their critical thinking skills for patients receiving drug therapy. Nursing management in drug therapy includes maximizing therapeutic effects, minimizing adverse effects, and patient and family education. The course content provides nurses in general practice with the knowledge to apply the foundation of basic pharmacology, with an emphasis on an inter-professional approach to practice. Application of this knowledge in the clinical setting allows nurses in general practice the ability to provide safe, effective nursing care using a holistic approach to improve patient and system outcomes. Prerequisites: NR.120.501-120.505

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] NR.120.537[C] Corequisite(s): NR.120.509[C] AND NR.120.511[C] AND NR.210.606[C]

AND NR.210.610[C]

AND NR.210.610[C]

NR.120.509. Promoting Health in Older Adults. 3 Credits.

This course is designed to promote understanding of the aging process and the role of the nurse with implications for promoting healthy aging and providing care across a continuum of care settings. Students will learn about U.S. and global demographic aging trends as well as other factors impacting physical, psychological, social, and spiritual wellbeing of individuals, families, and populations. Class discussions will include age-related changes and nursing strategies for promoting health, screening, and providing evidence-based care for older adults with complex co-morbidities, polypharmacy, and major geriatric syndromes. while managing health outcomes in various care settings and across transitions of care; economic and policy implications of health care provided by interprofessional teams for older adults; as well as national/ international models of care. Learning application activities are designed to enhance student critical thinking in providing care and promoting health and independence in older adults. Prerequisites: NR.120.501-505 Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] Corequisite(s): NR.120.507[C] AND NR.120.511[C] AND NR.210.606[C]

NR.120.511. Integrated Clinical Management: Chronic Health Alterations. 4 Credits.

This course focuses on chronic health alterations which impact individuals, families, and the communities within which they reside. Students will use the nursing process to provide comprehensive care to individuals with chronic health alterations in the acute care setting. Students will also use beginning skills to provide education to individuals and families in consideration of the provision of care across diverse health care settings. 112 clinical/simulation hours. Prerequisites: NR.120.501-120.505. Corequisite: NR.120.507.

Prerequisite(s): 1st semester Masters Entry courses are prerequisites for this course.NR.120.505[C] AND NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.537[C]

Corequisite(s): NR.120.507[C] AND NR.120.509[C] AND NR.210.606[C]

AND NR.210.610[C]

NR.120.513. Leadership for Professional Nursing. 3 Credits.

This course focuses on concepts central to the development of the beginning leadership role within the interprofessional team in the health care delivery system. Students will review key elements of management and leadership theory and roles, and will examine strategies and processes that address professionalism; improvement of care delivery; facilitation of change; quality and safety; principles of patient-centered care; evidence-based practice; decision making and problem solving; legal and ethical issues; and use of information technologies. Opportunities to apply knowledge to clinical case studies will be a major course focus.Prerequisites: NR.120.501-120.511

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.507[C] AND NR.120.511[C] AND NR.210.606[C] AND NR.210.606[C]

Corequisite(s): NR.210.610[C] AND NR.120.515[C] AND NR.120.516[C] AND NR.120.516[C]

NR.120.515. Psychiatric Mental Health. 3 Credits.

This course focuses on the application of the standards of psychiatric mental health nursing in promoting health and caring for health care consumers (defined as individuals, groups, and populations) with alterations in mental health. The major mental disorders are examined relative to etiology, clinical manifestations, and approaches to treatment, and considering variations among individuals and populations. Theories and principles underlying the provision of evidence-based patientcentered care are addressed. The human and economic impacts of mental disorders on the individual, family, and society are examined relative to ethical and legal considerations, health policy and health care financing. CLINICAL DESCRIPTION: Student clinical experiences are in acute care and community settings working in collaboration with the healthcare team. Students will have an opportunity to conduct comprehensive patient assessments, plan and implement care, and develop skills in therapeutic communication with patients, families, and groups, 112 clinical hoursPrerequisites; NR.120.501-120.511 Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C]

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.509[C] AND NR.120.606[C] AND NR.210.610[C]

Corequisite(s): NR.120.513[C] AND NR.120.516[C] AND NR.210.608[C] AND NR.210.610[C]

NR.120.516. Integrated Clinical Management: Complex Health Alterations. 4 Credits.

This course focuses on individuals and groups of clients experiencing complex medical surgical problems requiring therapeutic and restorative care in acute care settings. Students will collaborate with members of interdisciplinary health care teams in planning, implementing, and evaluating care to adults with complex needs in acute care settings. Students will demonstrate competence in providing safe and high quality nursing care to patients (families) with complex health problems in collaboration with other members of the health care team. 112 clinical hours.Prerequisites: NR.120.501-NR.120.511

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.511[C] AND NR.210.606[C] AND NR.210.606[C]

Corequisite(s): NR.120.513[C] AND NR.120.515[C] AND NR.210.608[C] AND NR.210.610[C]

NR.120.520. Nursing the Childbearing Family. 4 Credits.

In this course, students build on and further develop assessment, careplanning, communication, and leadership skills in the context of caring for childbearing families. The focal learning context is the inpatient labor and delivery and postpartum settings, however the course addresses related issues such as family planning and abortion care. All topics are considered in the context of the Universal Rights of Respectful Maternity Care. Students have the opportunity to examine the gap between evidence-based and current obstetric and neonatal nursing care norms and explore strategies for translation of evidence and effective inter-professional team communication. This course raises questions about and opportunities to impact issues of quality and safety, ethical practice, patient advocacy, and social determinants of health. Students are encouraged to put discussions into a broader social and geographic context and appreciate how these challenges and potential solutions vary across settings. 112 clinical hours. Prerequisites: NR.120.501-120.516 Prerequisite(s): NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.511[C] AND NR.210.606[C] AND NR.210.610[C] AND NR.120.513[C] AND NR.120.515[C] AND NR.120.516[C] AND NR.210.608[C] AND

Corequisite(s): NR.120.521[C] AND NR.120.521[C] AND NR.210.609[C]

NR.120.521. Child Health. 4 Credits.

In this course, the student will study the unique health and developmental needs of infants, children, and adolescents. The course is designed to develop perspectives on wellness and illness in children, emphasizing family-centered care that incorporates screening, teaching, and health counseling. There is a strong developmental and health promotion focus across settings. The course incorporates principles involved in assessment, planning and implementation of nursing interventions appropriate for children with various complex health problems. Health issues specific to children and health issues expressed in unique ways in children will be emphasized. Integration of child health care knowledge and clinical application of this knowledge is a requirement of this course. 112 clinical hours.Prerequisites: NR.120.501-NR.120.516

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.511[C] AND NR.210.606[C] AND NR.210.610[C] AND NR.120.513[C] AND NR.120.515[C] AND NR.120.515[C] AND NR.120.515[C] AND NR.120.516[C] AND NR.120.509[C] AND NR.120.509[C] AND NR.120.509[C]

NR.120.522. Public Health. 3 Credits.

This course provides students with an understanding of the relationship between public health and nursing practice. The course covers key aspects of public health science including epidemiology, social behavioral sciences, and environmental health. The student will have the opportunity to explore the application of public health science to real life health issues at the population level including evidenced-based approaches for optimizing the health of populations/communities. The content of the course provides the foundation for meeting the public health competencies for the generalist nurse with an emphasis on community assessment, health planning, as well as basic public health competencies such as surveillance, screening, immunization, communication, and outbreak investigation. In addition the student will explore issues related to outcome measurement at the population level and emergency preparedness/disaster management. 112 clinical hours.Prerequisites: NR.120.501-NR.120.516

NR.120.527. Integrated Clinical Management: Synthesis Practicum. 6 Credits.

This final clinical course incorporates both didactic, seminar and clinical experiences. Students will be assigned to one of a variety of types of care settings to complete 224 precepted clinical practice hours under the supervision of course faculty. Emphasis is placed on the synthesis of previous coursework and knowledge as students perform the role of an entry-level professional nurse. Students will develop independence in nursing practice, skill in clinical reasoning, and demonstrate accountability for autonomous professional practice. They will synthesize and apply principles of management theory to their nursing practice and demonstrate entry level skills in nursing leadership. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C] AND NR.120.537[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.509[C] AND NR.120.509[C] AND NR.210.606[C] AND NR.210.610[C] AND NR.120.513[C] AND NR.120.515[C] AND NR.120.515[C] AND NR.120.520[C] AND NR.120.520[C] AND NR.120.520[C] AND NR.120.520[C] AND NR.120.520[C] AND NR.120.609[C]

Corequisite(s): NR.210.607[C]

NR.120.529. Population and Public Health Nursing. 4 Credits.

This course focuses on developing public health nursing competencies and constructing knowledge of strategies to improve population health outcomes through public health science and population health management. Competencies are developed through community assessment, and practice in the principles of program development and evaluation to improve population health outcomes. The clinical portion of the course uses a critical service-learning pedagogy. The theory portion draws on the science of public health practice and conceptual frameworks for population health improvement to develop student learning in these areas. Content and approaches to practice are mutually reinforced in the theory and clinical elements. Students are provided an opportunity to explore publicly-available policy and population-level data platforms to inform interventions and to design, implement, and evaluate an agency-focused program at their clinical site. They gain knowledge and experience in navigating health policy frameworks and contributing to their development. Prerequisites: NR 120.513, NR 120.515, NR 120.516, NR 210.608

Prerequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.504[C] AND NR.120.504[C] AND NR.120.507[C] AND NR.120.509[C] AND NR.120.511[C] AND NR.210.606[C] AND NR.210.610[C] AND NR.120.513[C] AND NR.120.515[C] AND NR.120.515[C] AND NR.120.516[C] Corequisite(s): NR.120.520[C] AND NR.120.521[C] AND NR.210.609[C]

NR.120.530. Politics & Policy for the Health Care Professional. 1 - 2 Credits.

This course is an overview and an introduction to the political process relevant to health care and for health care professionals. It is intended to prepare health professionals to take active roles in policy development and patient, community, systems, and organizational advocacy. The course will review the steps involved with the political process, and provide students with the basic tools for becoming involved in politics. There will be an emphasis on how to navigate and negotiate political systems. this course will be offered online and include two legislative field trips, one to Washington, D.C. (optional) and the other to a legislative body meeting (mandatory). Students will also be required to interview an expert in health care and politics or health policy, who is a leader in health care and a leader of an organization that takes positions on health care legislation. Limited enrollment.

NR.120.531. Readiness for Practice. 1 Credit.

The purpose of this course is to assist the student(s) synthesize knowledge and skills for entry level registered nurses practice. Essential content is organized according to the National Council of State Board of Nursing practice analysis and NCLEX-RN licensing exam test plan. Based on individual needs assessments and gap analysis, individualized plansare established that include knowledge review, testing preparation, and study skills. This course will utilize group and individualized instruction to facilitate the learning process.

Corequisite(s): NR.120.527[C] AND NR.210.607[C]

NR.120.534. Quality Improvement & Safety: Systems Applications I. 1 Credit.

Fuld Fellows complete clinical hours. The hours are divided as follows: 50 hours with an assigned Quality Improvement (QI) or Safety project under the guidance of a project mentor and Fuld course faculty, clinical conference meetings (6 hours) with Fuld Faculty. In order to participate as a member of a clinical Quality or Safety project team, emphasis is placed on the synthesis of coursework and knowledge in quality improvement and safety gained in Foundations of Nursing Practice. Using written and verbal communication, Fellows will further develop teamwork and communication skills and leadership skills through reflection, ongoing self-assessment as a QI or Safety project team member, and evaluation of communication that impedes or enhances effective teams. Students will also reflect on the QI and Safety, teamwork and communication, and leadership in their clinical practice sites in their Fuld Fellowship clinical journals and in class discussion. Prerequisites: NR.120.501-120.505Corequisites: NR.120.507-120.511

NR.120.535. Quality Improvement & Safety: Systems Applications II. 1 Credit.

In this course, Fuld Fellows complete clinical hours focused on a Quality Improvement (QI) or Safety project under the guidance of a mentor and course faculty. Fellows continue to participate as a member of a clinical QI or Safety project team and emphasis is placed on the synthesis of 120.534 coursework and knowledge in quality and safety. Teamwork, communication, and leadership skills will continue to develop through ongoing self-assessment and evaluation. In addition, this course will feature guest lectures from interprofessional leaders in the field of QI and patient safety. Prerequisite: NR.120.534

Prerequisite(s): NR.120.534[C]

NR.120.537. Community Outreach to Underserved Communities in Urban Baltimore. 1 Credit.

This course provides students with an overview of Baltimore's vulnerable communities and underserved populations. Students gain a broad perspective on factors affecting the health of underserved and vulnerable communities in urban Baltimore. Students will develop cultural competency skills to work effectively in partnership with Baltimore communities. The course includes the history of Johns Hopkins nursing and Baltimore's history, a broad definition of health focusing on social determinants of health factors such as poverty, housing, violence, substance abuse, disparities in health and health care, social justice, vulnerable populations, employment, safety, and the environment. Students will also examine the influence of implicit bias on communication and interventions as well as the importance of integration trauma-informed care in urban environments. Selected Baltimore community health interventions are presented with emphasis on health promotion and community organizing. Local community and civic leaders present their roles and discuss current public health issues facing Baltimore. Students will learn about local neighborhoods, community agencies, and resources and gain basic skills in basic community assessment.

Corequisite(s): NR.120.501[C] AND NR.120.502[C] AND NR.120.503[C] AND NR.120.504[C] AND NR.120.505[C]

NR.120.538. Nursing Research Seminar. 1 Credit.

This course will provide an exploration of the design and conduct of research in the health sciences. Students will be introduced to common research designs through the discussion of ongoing research of faculty. Students will examine current topics and issues in nursing research. Discussions will cover the ways in which the nursing perspective shapes the conduct and results of research. Topical seminars also will incorporate an interdisciplinary perspective. The goal is to engage students in the ongoing research of faculty and promote intellectual growth among highly motivated pre-licensure Master's students who aspire to learn more about nursing research. The course must be taken each semester that the student is participating in the Research Honors Program. Prerequisite: Admission to Research Honors Program

NR.120.539. Community Perspectives on the Childbearing Process. 2 Credits.

This course focuses on developing initial competence in the birth companion role, based on the Doula model. The Doula model emphasizes physical, emotional, and informational support to the mother before, during, and after childbirth. Maternal and child health nursing and community health nursing theories and practices are reinforced. In addition to class time, biweekly meetings are held to discuss birth experiences and case management issues, and to hear presentations from experts in the field, including lactation consultants, social workers, community health educators and child birth educators. Limited enrollment. Course may span more than one term.

NR.120.544. Seminar in Specialty Nursing: Introduction to Emergency Nursing. 3 Credits.

This course is designed to expand the student's learning in a specified topic related to nursing practice. Advanced theories and principles related to the delivery of nursing care in selected settings and/or with selected patient populations are presented as seen in the ED setting. The course builds on the previous coursework throughout the curriculum. In this Specialty Nursing Seminar, students will acquire an overview of the principals involved in the planning and implementation of nursing interventions for patients in Emergency Department (ED) settings. Content will focus on the unique environment of the ED with an emphasis on patient assessment, triage principles, ACLS protocols, Trauma Patient Management, and Disaster Preparedness & Response Principles. Using a systems approach, the students will review the etiologies, clinical presentations, pathophysiology, and nursing interventions for these patients. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.529[C]

NR.120.545. Seminar in Specialty Nursing: The Nurse's Role in Caring for the Childbearing Family and Newborns. 3 Credits.

This course is designed to expand the student's learning in the childbearing family and newborn care. This course will introduce students to theory and its application to practice and research, providing critical indepth information of "hot topics" in providing evidence-based care to the childbearing family and newborns. In this nursing specialty seminar, the students will develop a comprehensive understanding of the physiologic, psycho-social, legal, and ethical considerations impacting the nurse's role in caring for the childbearing family and newborns. Students will learn about advanced physiologic principles of genetic screening modalities, including first and second trimester screening and testing for Down's syndrome and open neural tube defects. Students will review physiologic principles underlying screening modalities for fetal well-being during pregnancy and the birth process, including advanced concepts in fetal monitoring. Students will engage in a role play simulation that includes key concepts in quality and safety, including patient advocacy, teamwork and interprofessional communication. Ethical considerations, legal and risk management issues for the nurse in clinical practice will be reviewed. Current practice guidelines from key professional organizations (AWHOHH, ACNM, ACOG, NICHD) will be analyzed from an evidencebased perspective. Neonatal resuscitation will be introduced with practical application. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.529[C]

Corequisite(s): NR.120.527[C] AND NR.210.607[C]

NR.120.546. Seminar in Specialty Nursing: Acute Care of Children. 3 Credits.

This course is designed to expand the student's learning in a specified area related to nursing practice and research. Advanced theories and principles related to the delivery of nursing care in selected settings and/or with selected populations are presented. The student will build on previous pediatric content, gaining more depth in the acute care topics. During the course, students will examine trauma care, pediatric sepsis and shock, congenital heart defects, child life and non-pharmacologic pain intervention, hematology and oncology, pediatric respiratory diseases and support, and student-led topics of interest in pediatric acute care. The students will select the area of nursing practice and research they would like to explore in more depth. The course will conclude with small group evidence-based practice presentations using questions to be researched that may have been stimulated from problems discovered in previous pediatric clinical rotations. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.529[C]

Corequisite(s): NR.120.527[C] AND NR.210.607[C]

NR.120.547. Seminar in Specialty Nursing: Introduction to Acute/Critical Care. 3 Credits.

This course is designed to expand the student's learning in a specified topic related to nursing practice. Advanced theories and principles related to the delivery of nursing care in selected settings and/or with selected patient populations are presented. The course builds on the previous coursework throughout the curriculum. Students will acquire an overview of the unique environment of the Acute/ Critical Care Unit. The focus will be the principles involved in planning, implementing and evaluating nursing and medical interventions for critical care patients. The students will review the causes, clinical presentations, pathophysiology and hemodynamic changes of patients with respiratory failure, heart failure, intracerebral hemorrhage, renal failure, shock and sepsis. Content will include the medications, advanced monitoring, and equipment used in the critical care setting. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.529[C]

Corequisite(s): NR.120.527[C] AND NR.210.607[C]

NR.120.548. Seminar in Specialty Nursing: Preparing for Global Nursing. 3 Credits.

This course is designed to orient students to global health priorities and nursing's unique position in meeting international, health-related goals. Students will use weekly topical areas of interest to engage with policy and practice issues relevant to nursing in low and middle income countries (LMIC). Students are encouraged to compare and contrast nursing education, policy, and practice across settings and in so doing, better understand the contribution of nursing in LMIC and their own readiness to contribute in international settings. Learning activities are designed to introduce students to global health priorities and influential international nursing, nongovernmental, and governmental organizations. Students will discuss the complex influences on health in LMIC and explore the connectedness between these and their own experience nursing in the US. Assignments are designed to provide opportunities to explore and apply an expanded range of resources and evidence to the nursing process as they address global health problems. Prerequisites: NR.120.501-120.522

Prerequisite(s): NR.120.529[C]

Corequisite(s): NR.120.527[C] AND NR.120.527[C]

NR.120.549. Health Systems Science: Interprofessional Collaboration to Improve Medication Safety. 2 Credits.

This course gives interprofessional (IP) learners opportunity to explore topics related to safe, timely, efficient, effective, equitable and patient-centered medication-use systems. Through an interprofessional context, students will explore medication safety issues as they relate to the health care system, evidence-based practice, quality and performance improvement, health information technologies, and, ultimately, health equity. Students will use an interprofessional framework to examine and apply systems thinking, human factors engineering principles, and high reliability principles to medication safety problems. Students will explore experiences of professions (other than their own) involved in the medication-use process to better engage in communication and decision making in the interprofessional environment.

NR.120.550. Health Systems Science: Fostering Future leaders for Interprofessional Practice (Health FLIP). 2 Credits.

This course is designed to develop health care leaders by teaching and providing opportunities health care professional students (nursing, medical, and pharmacy) to practice collaborative strategies in a community setting. Virtual seminars are designed to focus on the IPEC competencies: values and ethics, roles and responsibilities, communication, and teams and teamwork. This program will also apply strengths-based leadership development strategies for our students to: 1) introduce the strength-based paradigm strategy for professional development 2) celebrate the diversity of strengths amongst health professions students 3) foster a sense of community that encourages professional identity and camaraderie with other health professions students. A Strengths-Based Health Professions Workshop will be tailored to students to explore this method in their journey as a leader and a healthcare team member. This interactive and community-oriented program will include customized exercises, materials, and group activities developed from the Strengths Certified Coaching Teams' armamentarium. A variety of learning modalities will be used for this course including, role play, case studies, a mix of in person an virtual health mentor visits, health promotion projects, and didactic seminars by experts in the field. Students will regularly reflect on these experiences as they consider their impact on pursuit of health equity and their future practice with both colleagues and community members.

Prerequisite(s): NR.120.549[C]

NR.210

NR.210.600. Advanced Physiology/Pathophysiology. 4 Credits.

This course focuses on the interrelationship between physiology and pathophysiology that affect wellness and disease processes across the lifespan. Attention is directed to the influence of social determinants of health and the impact of stress-related maladaptation on the health of individuals and populations across the lifespan. With this knowledge, students will be able to interpret changes in normal functions that indicate illness and identify principles underlying disease prevention and treatment strategies. This course serves as the foundation for synthesis and application of physiology and pathophysiology to health conditions that students will utilize for learning in their program of study and their future role as advanced practice providers.

NR.210.601. Advanced Health Assessment and Measurement. 3 Credits.

This course will build upon health assessment skills developed in the basic nursing educational program. In this course students will attain advanced knowledge and skills in history taking, biopsychosocial and cultural health assessment across the lifespan. The laboratory experiences utilizing a systems approach will focus on assessment of clients and presentation of normal and abnormal findings.Pre or corequisite: NR.210.600

Prerequisite(s): NR.210.600[C]

NR.210.602. Clinical Pharmacology. 4 Credits.

This course will build upon basic pharmacology knowledge attained in the professional nurse's education and experience. This advanced course focuses on the clinical use of drugs for clinical conditions most commonly seen in practice and across the lifespan. Principles of rational medication prescribing based on evidenced-based guidelines, pharmacology principles, lifespan considerations, cultural, socioeconomic and legal influences will be presented. Prescription medications will be the focus of the course; however, over-the-counter and complementary and alternative medications will be discussed for certain disease states. Completion of this course will enable students to identify pharmacologic treatments for commonly encountered clinical conditions, as well as, prescribe, manage and evaluate drug therapy.

NR.210.603. Human Growth and Development: Birth through Adolescence. 1 Credit.

This course describes normal and abnormal variations in growth and development from birth through adolescence. An emphasis on appropriate screening, identification, and management of abnormal variations in growth and development will be discussed.

NR.210.604. Health Supervision: Birth through Adolescence. 2 Credits. Health supervision includes the promotion of a healthy environment through screening, disease and injury prevention, and anticipatory guidance. This course discusses key components of health supervision as well as identification, prevention and management of common health concerns that may be encountered during health maintenance exams in pediatrics.Prerequisite: NR.210.603

NR.210.605. Diagnostic Skills and Procedures for Advanced Practice Nursing. 2 Credits.

This course provides theoretical knowledge and emphasizes psychomotor skills necessary to provide selected advanced practice nursing interventions utilized in the evaluation and management of patients. This course introduces evaluation, selection, interpretation, and application of diagnostic testing, evaluation techniques and procedures. Evidence-based clinical reasoning and decision-making techniques are presented and applied in simulation lab practices for skills acquisition and demonstration of competency.Prerequisite: NR.210.601

Prerequisite(s): NR.210.601 is a prerequisite for this course.

NR.210.606. Biostatistics for Evidence-Based Practice. 3 Credits.

This course is intended to apply standard statistical methods to develop knowledge and skills, enabling students to understand data collection and analysis methods, interpretation and reporting of statistical results, and critically read and evaluate nursing and the healthcare literature. The emphasis is on understanding the relevance and use of appropriate statistical methods in nursing research. Published nursing research articles in peer reviewed nursing and healthcare journals, and computing lab experiences are used to motivate topics covered in classes. Prerequisite: College level Statistics or Biostatistics course.

NR.210.607. Context of Health Care for Advanced Nursing Practice. 3 Credits.

This three credit course examines the scope and status of professional roles and responsibilities of nurses prepared to assume accountability for quality care outcomes; navigate and integrate care services across the healthcare system; collaborate with and build interprofessional care teams; design innovative nursing practices; and facilitate the translation of evidence into practice. This course focuses on personal leadership and the associated skills and knowledge to practice as a contemporary professional nurse. Course content and activities focus on understanding the forces driving contemporary health care, as well as efficient and effective function in a continuously changing health care environment.

NR.210.608. The Research Process and Its Application to Evidence-Based Practice. 3 Credits.

This course will prepare students for clinical leadership roles in health care through the translation of the best available scientific evidence into nursing practice. Students will develop the requisite critical skills and knowledge to independently search for, review, appraise, and synthesize research literature of particular interest to nursing practice. Students will be prepared to recommend practice changes at the individualand system-level based on the strength of the evidence. Prerequisite: NR.210.606, 120.508, or 110.507

NR.210.609. Philosophical, Theoretical & Ethical Basis of Advanced Nursing Practice. 3 Credits.

This course will explore the conceptual, theoretical, and ethical bases of nursing. Selected conceptual models and frameworks of nursing and ethics will be analyzed with emphasis on implications for nursing practice. This course is designed to provide students with frameworks, concepts, and personal and professional exercises for approaching nursing practice issues and to enhance the student's understanding of ethical issues in nursing and in health care and to respond to them specifically.

NR.210.610. Health Promotion and Risk Reduction Across the Lifespan. 2 Credits.

This course introduces the student to current issues, theories, and research in health promotion, disease prevention, and risk reduction related to individuals, families, aggregates, and communities. The role of the nurse in risk assessment, counseling, education, and screening will be emphasized as well as thinking broadly about health promotion needs and health behavior from an ecological perspective.

NR.210.612. Diagnostic Skills for Psychiatric and Mental Health Advanced Practice Nursing. 1 Credit.

This course provides theoretical knowledge and emphasizes skills necessary to provide selected advanced practice nursing interventions utilized in the evaluation and management of psychiatric and mental health patients. This course introduces evaluation, selection, interpretation, and application of diagnostic testing and evaluation techniques. Evidence-based clinical reasoning and decision-making techniques are presented for skills acquisition and demonstration of competency.

NR.210.620. Clinical Reasoning I: Common Acute Illnesses in Pediatrics. 2 Credits.

This is the first of five sequential theory courses that will prepare Family Nurse Practitioner (FNP) and/or Pediatric Nurse Practitioner (PNP) students to provide primary care to pediatric patients, especially those experiencing common acute illnesses in one or more body systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis and management of common acute health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for pediatric patients. FNP and PNP students focus on health care for the pediatric population with particular emphasis on underserved and those from various cultures, emphasizing health promotion, patient education, and disease prevention.Prerequisites: NR. 210.600, 210.601, 210.602, 210.603, and 210.604Corequisite: NR.210.605

Prerequisite(s): NR.210.600, 601, and 602 are prerequisites for this course.;NR.210.600[C] AND NR.210.601[C] AND NR.210.602[C] AND NR.210.603[C] AND NR.210.604[C] AND NR.210.605[C]

Corequisite(s): NR.210.605[C] AND NR.210.602[C]

NR.210.621. Clinical Reasoning II: Common Chronic Illnesses in Adult/ Geriatric Health. 2 Credits.

This is the second of five sequential theory courses that will prepare Family Nurse Practitioner (FNP) students and AGNP Primary Care students to provide primary care for adults and geriatrics, especially in those experiencing common chronic illnesses in one or more body systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis and management of common chronic health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up for patients with common chronic problems. FNP and AGNP Primary Care students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from various cultures, emphasizing health promotion, patient education, and disease prevention. Prerequisite: NR.210.620Corequisite: NR.210.625

Prerequisite(s): NR.210.620 is a prerequisite for this course.

Corequisite(s): NR.210.625[C]

NR.210.622. Clinical Reasoning III: Clinical Management for the Primary Care Nurse Practitioner in Acute Complex Issues from Adolescence to Aging and Issues in Gender Health. 2 Credits.

This is the third of five sequential theory courses that will prepare primary care nurse practitioner students to provide primary care for adolescents, obstetrical patients and their families, and focus on gender health conditions. This course provides didactic content to prepare the primary care nurse practitioner student to provide primary care to adolescents and adults experiencing acute complex problems with an emphasis in obstetrical, gender and behavioral health systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis, and management of acute complex health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients. Primary care nurse practitioner students focus on health care for adolescents, obstetrical, and gender health populations, with particular emphasis on underserved and those from various cultures emphasizing health promotion, patient education, and disease prevention. Prerequisites: NR.210.621 and 210.625 Corequisite: NR.210.626

Prerequisite(s): NR.210.621[C] AND NR.210.625[C]

Corequisite(s): NR.210.626[C]

NR.210.623. Clinical Reasoning IV: Common Acute and Complex Chronic Illnesses in Primary Care in Adults/Geriatrics. 2 Credits.

This course provides didactic content to prepare the adult/gerontology and family nurse practitioner student to provide primary care to adults and older adults, experiencing common acute and complex chronic illnesses in one or more body systems. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. Content addresses comprehensive diagnosis and management of common acute and complex chronic health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with common acute and complex chronic problems. Nurse practitioner students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from various cultures. Students also emphasize health promotion, patient education, and disease prevention, screening of adult and older populations, and providing culturally competent care. Prerequisites: NR.210.622 and 210.626Corequisite: NR.210.627

Prerequisite(s): NR.210.622[C] AND NR.210.626[C]

Corequisite(s): NR.210.627[C]

NR.210.624. Clinical Reasoning V: Clinical Management for the Family Nurse Practitioner - Role Transition and Special Topics in Family Health. 2 Credits.

This course provides didactic content to prepare the Family Nurse Practitioner (FNP) student to provide primary care to children and adults throughout the lifespan, experiencing chronic complex health problems with an emphasis on coordination on older populations and selected groups with atypical presentations. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis, and management of acute complex health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients. FNP students focus on health care for all populations and all age groups with particular emphasis on underserved and those from various cultures emphasizing health promotion, patient education, and disease prevention. Prerequisites: NR.210.623 and 210.627 Corequisite: NR.210.628

Prerequisite(s): NR.210.623 and 627 are prerequisites for this

course.;NR.210.623[C] AND NR.210.627[C]

Corequisite(s): NR.210.628[C]

NR.210.625. Clinical Practicum I: Family Nurse Practitioner. 3 Credits. Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 168 hours of clinical experience in adult, pediatric, women's health or family medicine setting. This first sequential course will prepare students to diagnose, treat, and follow-up patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, sexuality, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric and adult healthcare settings. Prerequisite: NR.210.620Corequisite: NR.210.621

Prerequisite(s): NR.210.620 is a prerequisite for this course.

NR.210.626. Clinical Practicum II: Family Nurse Practitioner. 3 Credits. Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 168 hours of clinical experience in adult, pediatric, women's health or family medicine setting. This second sequential clinical course will prepare students to diagnose, treat, and follow-up patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, sexuality, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric and adult healthcare settings.Prerequisites: NR.210.621 and 210.625Corequisite: NR.210.622 Prerequisite(s): NR.210.621[C] AND NR.210.625[C]

Corequisite(s): NR.210.622[C]

NR.210.627. Clinical Practicum III: Family Nurse Practitioner. 2 Credits. Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 112 hours of clinical experience in adult, pediatric, women's health or family medicine setting. This third sequential clinical course will prepare students to diagnose, treat, and follow-up patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, sexuality, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric and adult healthcare settings.Prerequisites: NR.210.622 and 210.626Corequisite: NR.210.623

Prerequisite(s): NR.210.622 and 626 are prerequisites for this

course.;NR.210.622[C] AND NR.210.626[C]

Corequisite(s): NR.210.623[C]

NR.210.628. Clinical Practicum IV: Family Nurse Practitioner. 2 Credits. Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 112 hours of clinical experience in adult, pediatric, women's health or family medicine setting. This fourth sequential clinical course will prepare students to diagnose, treat, and follow-up patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, sexuality, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric and adult healthcare settings.Prerequisites: NR.210.623 and 210.627Corequisite: NR.210.624 Prerequisite(s): NR.210.623 and 627 are prerequisites for this course.; NR.210.623[C] AND NR.210.627[C]

Corequisite(s): NR.210.624[C]

NR.210.629. Clinical Practicum V: Family Nurse Practitioner. 4 Credits. Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 224 hours of clinical experience in adult, pediatric, women's health or family medicine setting. This fifth and final sequential clinical course will prepare students to diagnose, treat, and follow-up patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, sexuality, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric and adult healthcare settings. Prerequisites: NR.210.624 and 210.628

Prerequisite(s): NR.210.624 and 628 are prerequisites for this course.; NR.210.624[C] AND NR.210.628[C]

NR.210.630. Clinical Reasoning I - Clinical Management for the Pediatric Nurse Practitioner. Common Acute Illnesses in Pediatrics. 2 Credits.

This is the first of five sequential theory courses that will prepare Pediatric (PNP) students to provide primary care to pediatric patients, especially in those experiencing common acute illnesses in one or more body systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis and management of common acute health conditions, including appropriate diagnostic procedures, laboratory tests, and follow-up care for pediatric patients. PNP students focus on health care for the pediatric population with particular emphasis on underserved and those from various cultures, emphasizing health promotion, patient education, and disease prevention. Prerequisites: NR.210.600, 210.601, 210.602, 210.603, 210.604 Prerequisite(s): NR.210.600, 601, and 602 are prerequisites for this course.; NR.210.600[C] AND NR.210.601[C] AND NR.210.605[C]

NR.210.631. Clinical Reasoning II-Clinical Management for the Pediatric Nurse Practitioner. Chronic Illnesses in Pediatrics. 2 Credits.

This is the second of five sequential theory courses that will prepare Pediatric Nurse Practitioner (PNP) students to provide primary care to pediatric patients, especially in those experiencing common chronic illnesses in one or more body systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis and management of common chronic health conditions, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with common chronic conditions. PNP students focus on health care for the pediatric population with particular emphasis on underserved and those from various cultures, emphasizing health promotion, patient education, and disease prevention. Prerequisite: NR.210.630Corequisite: NR.210.635

Prerequisite(s): NR.210.630 is a prerequisite for this course.

Corequisite(s): NR.210.635[C]

NR.210.632. Clinical Reasoning III: Acute Complex Problems with Gender and Behavior Health (with variations). 2 Credits.

This is the third of five sequential theory courses that will prepare the Pediatric Nurse Practitioner (PNP) to provide primary care to the pediatric experiencing acute complex health conditions with an emphasis in gender and behavioral health systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis, and management of acute complex health conditions, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients. PNP students focus on health care for all populations and all age groups with particular emphasis on underserved and those from various cultures emphasizing health promotion, patient education, and disease prevention. Prerequisites: NR.210.631 and 210.635 Corequisite: NR.210.636

Prerequisite(s): NR.210.631 and 635 are prerequisites for this

course.;NR.210.631[C] AND NR.210.635[C]

Corequisite(s): NR.210.636[C]

NR.210.633. Clinical Reasoning IV-Clinical Management for the Pediatric Nurse Practitioner: Problems Specific to the Newborn/Infant. 2 Credits.

This is the fourth of five sequential theory courses that will prepare Pediatric Nurse Practitioner (PNP) students to provide primary care to clinical conditions that affect newborns and infants in one or more body systems. It integrates evidence-based aspects of care that are based on age, gender, sexuality and social determinants of health. Content addresses comprehensive assessment, diagnosis and management of newborn and infant health conditions, including appropriate diagnostic procedures, laboratory tests, and follow-up care for newborn and infant patients. PNP students focus on health care the newborn and infant with particular emphasis on underserved and those from various cultures, emphasizing health promotion, patient education, and disease prevention. Prerequisite: NR.210.632 and 210.636Corequisite: NR.210.637

course.;NR.210.632[C] AND NR.210.636[C]

Corequisite(s): NR.210.637[C]

NR.210.634. Clinical Reasoning V - Topics for Pediatric Nurse Practitioner Practice. 2 Credits.

Prerequisite(s): NR.210.632 and 636 are prerequisites for this

This is the final course in a series of five that provides didactic content to prepare the Pediatric Nurse Practitioner (PNP) student to practice as a PNP in the primary care setting. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. The course emphasizes the legal, regulatory, and scope of practice issues and readies the student for entry into practice. Attention is directed towards quality, safety, and risk management monitoring, and nurse practitioner-driven outcomes. The course will also explore patient transitions of care, palliative care decisions, development of expert communication skills in difficult conversations, and practice-delivery models for care. Prerequisites: NR.210.633 and 210.637 Corequisite: NR.210.638

Prerequisite(s): NR.210.633 and 637 are prerequisites for this

course.;NR.210.633[C] AND NR.210.637[C]

Corequisite(s): NR.210.638[C]

NR.210.635. Clinical Practicum I: Pediatric Nurse Practitioner. 2 - 3 Credits.

This first sequential clinical course will prepare students to diagnose, treat, and follow-up pediatric patients and families. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric healthcare settings. 112 clinical hours.Prerequisite: NR.210.630Corequisite: NR.210.631

Prerequisite(s): NR.210.630 is a prerequisite for this course.

Corequisite(s): NR.210.631[C]

NR.210.636. Clinical Practicum II: Pediatric Nurse Practitioner. 2 - 3 Credits.

Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 112-168 hours of clinical experience in a pediatric primary care, newborn nursery, school based health center or pediatric specialty practice. This second sequential clinical course will prepare students to diagnose, treat, and follow-up pediatric patients. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric healthcare settings. Prerequisites: NR.210.631 and 210.635Corequisite: NR.210.632

Prerequisite(s): NR.210.631 and 635 are prerequisites for this

course.;NR.210.631[C] AND NR.210.635[C]

Corequisite(s): NR.210.632[C]

NR.210.637. Clinical Practicum III: Pediatric Nurse Practitioner. 2 - 3 Credits.

Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in clinical experiences in a pediatric primary care, acute care or specialty settings. This third sequential clinical course will prepare students to diagnose, treat, and follow-up pediatric patients with common, complex acute, and chronic care conditions. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric healthcare settings.Prerequisites: NR.210.632 and 210.636Corequisite: NR.210.633

Prerequisite(s): NR.210.632 and 636 are prerequisites for this

course.;NR.210.632[C] AND NR.210.636[C]

Corequisite(s): NR.210.633[C]

NR.210.638. Clinical Practicum IV: Pediatric Nurse Practitioner. 2 Credits.

Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 112 hours of clinical experience in a pediatric primary care, newborn nursery, school based health center or pediatric specialty practice. This fourth sequential clinical course will prepare students to diagnose, treat, and follow-up pediatric patients. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric healthcare settings.Prerequisites: NR.210.633 and 210.637Corequisite: NR.210.634 Prerequisite(s): NR.210.633 and 637 are prerequisites for this course.

Corequisite(s): NR.210.634[C]

NR.210.639. Clinical Practicum V: Pediatric Nurse Practitioner. 4 Credits.

Under the guidance of a clinical faculty instructor and experienced preceptor, the student will participate in 224 hours of clinical experience in a pediatric primary care, newborn nursery, school based health center or pediatric specialty practice. This fifth sequential clinical course will prepare students to diagnose, treat, and follow-up pediatric patients. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of pediatric healthcare settings.Prerequisites: NR.210.634 and 210.638

Prerequisite(s): NR.210.634 and 638 are prerequisites for this course.; NR.210.634[C] AND NR.210.638[C]

NR.210.640. Clinical Reasoning I: Common Acute Illness. 2 Credits.

This course provides content to prepare the adult/gerontology nurse practitioner student to provide primary care to adults, experiencing common acute illnesses in one or more body systems. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. Content addresses comprehensive diagnosis and management of common acute health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with common acute problems. Nurse practitioner students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from various cultures. Students also emphasize health promotion, patient education, and disease prevention, screening of adult and older populations, and providing culturally competent care. Prerequisites: NR.210.600, 210.601, and 210.602

Prerequisite(s): NR.210.600, 601 and 602 are prerequisites for this course.

Corequisite(s): NR.210.605[C]

NR.210.641. Clinical Reasoning II: Common Chronic Illnesses in Adult/ Geriatric Health. 2 Credits.

This course provides content to prepare the adult/gerontology nurse practitioner student to provide primary care to adults experiencing health problems in one or more body systems. This course prepares students to diagnose, treat and follow-up common chronic illnesses in adults. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. Didactic content addresses comprehensive diagnosis and management of common chronic health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with common chronic problems. Nurse practitioner students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from other cultures. Students also emphasize health promotion and disease prevention, screening of adult and older populations, and providing culturally competent care. Prerequisite: NR.210.640Corequisite: NR.210.645

Prerequisite(s): NR.210.640 is a prerequisite for this course.

Corequisite(s): NR.210.645[C]

NR.210.642. Clinical Reasoning III: Clinical Management for the Primary Care Nurse Practitioner in Acute Complex Issues from Adolescence to Aging and Issues in Gender Health. 2 Credits.

This course provides content to prepare the adult/gerontology nurse practitioner student to provide primary care to adults, including older persons, experiencing health problems in one or more body systems. This course prepares students to diagnose, treat and follow-up acute complex illnesses in adults. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. Didactic content addresses comprehensive diagnosis and management of acute complex health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with acute complex problems. Nurse practitioner students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from other cultures. Students also emphasize interdisciplinary practice and referral patterns for optimal patient health.Prerequisites: NR.210.641 and 210.645Corequisite: NR.210.646

Prerequisite(s): NR.210.641 and 645 are prerequisites for this

course.;NR.210.641[C] AND NR.210.645[C]

Corequisite(s): NR.210.646[C]

NR.210.643. Clinical Reasoning IV: Complex Chronic Illness. 2 Credits.

This course provides content to prepare the adult/gerontology nurse practitioner student to provide primary care to adults, including older persons, experiencing health problems in one or more body systems. This course prepares students to diagnose, treat and follow-up complex chronic illnesses in adults. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. Content addresses comprehensive diagnosis and management of complex chronic health problems, including appropriate diagnostic procedures, laboratory tests, and follow-up care for patients with chronic complex problems. Nurse practitioner students focus on health care for all populations and all adult age groups with particular emphasis on underserved and those from other cultures. Students also emphasize health promotion and disease prevention, patient advocacy, screening of adult and older populations, and providing culturally competent care. Prerequisites: NR.210.642 and 210.646Corequisite: NR.210.647

Prerequisite(s): NR.210.642 and 646 are prerequisites for this

course.;NR.210.642[C] AND NR.210.642[C]

Corequisite(s): NR.210.647[C]

NR.210.644. Clinical Reasoning V: Topics for Nurse Practitioner Practice. 2 Credits.

This course provides content to prepare the adult/gerontological nurse practitioner student for transition to a primary care nurse practitioner who cares for adults. It integrates evidence-based biomedical, psychological, social and nursing aspects of care that is based on age, gender, culture, and ethnicity. The course emphasizes care of complex patients and the legal, regulatory, and scope of practice issues and readies the student for entry into practice. Attention is directed towards quality, safety, and risk management monitoring, and nurse practitioner-driven outcomes. The course will also explore patient transitions of care, end of life care decisions, development of expert communication skills in difficult conversations, and practice-delivery models for care.Prerequisites: NR.210.643 and 210.647Corequisite:

Prerequisite(s): NR.210.643 and 647 are prerequisites for this course. **Corequisite(s):** NR.210.648[C]

NR.210.645. Clinical Practicum I: Adult-Gerontological Nurse Practitioner. 2 - 3 Credits.

The course will prepare students to diagnose, treat, deliver patient education, and follow-up common acute illnesses in adult-gero patients. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of adult care settings. 112 clinical hours. Prerequisite: NR.210.640 Corequisite: NR.210.641 Prerequisite(s): NR.210.640 is a prerequisite for this course. Corequisite(s): NR.210.641[C]

NR.210.646. Clinical Practicum II: Adult-Gerontological Nurse Practitioner. 2 - 3 Credits.

The course will prepare students to diagnose, treat, deliver patient education, and follow-up common acute and chronic illnesses in adults. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of adult care settings. 112 clinical hours.Prerequisites: NR.210.641 and 210.645Corequisite: NR.210.642 Prerequisite(s): NR.210.641 and 645 are prerequisites for this course.;NR.210.641[C] AND NR.210.641[C]

Corequisite(s): NR.210.642[C]

NR.210.647. Clinical Practicum III: Adult-Gerontological Nurse Practitioner. 2 - 3 Credits.

The course will prepare students to diagnose, treat, deliver patient education, and follow-up common and complex acute illnesses and common chronic illnesses in adults. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of adult care settings. 112 clinical hours.Prerequisites: NR.210.642 and 210.646Coreguisite: NR.210.643 Prerequisite(s): NR.210.646[C] AND NR.210.642[C]

Corequisite(s): NR.210.643[C]

NR.210.648. Clinical Practicum IV: Adult-Gerontological Nurse Practitioner. 2 - 3 Credits.

The course will prepare students to diagnose, treat, deliver patient education, and follow-up common and complex acute illnesses and common and complex chronic illnesses in adults. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of adult care settings. 112 clinical hours.Prerequisites: NR.210.643 and 210.647Corequisite: NR.210.644 Prerequisite(s): NR.210.643 and 647 are prerequisites for this

course.;NR.210.643[C] AND NR.210.647[C]

Corequisite(s): NR.210.644[C]

NR.210.649. Clinical Practicum V: Adult-Gerontological Nurse Practitioner. 4 Credits.

The course will advance students towards independence in the role of adult/gerontology nurse practitioner in prevention, screening, illness, and care transition for adults. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. Application and utilization of evidence is emphasized in a variety of adult care settings. 224 clinical hours. Prerequisites: NR.210.644 and 210.648 Prerequisite(s): NR.210.644 and 648 are prerequisites for this

course.;NR.210.644[C] AND NR.210.644[C]

NR.210.650. Clinical Judgment I-The Role of the CNS in Clinical Decision Making: Common Health Problems. 3 Credits.

This is the first of three sequential theory courses that will provide the clinical nurse specialist (CNS) student with opportunities to demonstrate advanced clinical judgment and to increase their depth of knowledge across the health care continuum within a population focus. The student will synthesize knowledge of common health problems and advanced assessment; develop and evaluate evidence-based nursing and symptom management plans of care; propose strategies for measuring outcomesdriven care; recommend strategies for patient and professional education in the care of patients and their families; and recommend appropriate referrals and consultations across the health care continuum within a population focus. Prerequisites: NR.210.600, 210.601, 210.602 Prerequisite(s): NR.210.600, 601, and 602 are prerequisites for this course.

NR.210.651. Clinical Judgment II-The Role of the CNS in Clinical Decision Making: Acute & Chronic Health Problems. 3 Credits.

This is the second of three sequential theory courses that will prepare the clinical nurse specialist (CNS) student with opportunities to demonstrate advanced clinical judgment and to increase their depth of knowledge across the health care continuum within a population focus. The student will synthesize knowledge of acute and chronic health problems and advanced assessment; develop and evaluate evidence-based nursing and symptom management plans of care; propose strategies for measuring outcomes-driven care; recommend strategies for patient and professional education in the care of patients and their families; and recommend appropriate referrals and consultations across the health care continuum within a population focus. Prerequisite: NR.210.650Pre or corequisite: NR.210.653

Prerequisite(s): NR.210.650 is a prerequisite for this course. Corequisite(s): NR.210.653[C]

NR.210.652. Clinical Judgment III-The Role of the CNS in Clinical Decision Making: Complex Health Problems. 3 Credits.

This is the third of three sequential theory courses that will prepare the clinical nurse specialist (CNS) student with opportunities to demonstrate advanced clinical judgment and to increase their depth of knowledge across the health care continuum within a population focus. The student will synthesize knowledge of complex health problems and advanced assessment; develop and evaluate evidence-based nursing and symptom management plans of care; propose strategies for measuring outcomesdriven care; recommend strategies for patient and professional education in the care of patients and their families; and recommend appropriate referrals and consultations across the health care continuum within a population focus. Prerequisite: NR.210.651 Pre or corequisite: NR.210.653 Prerequisite(s): NR.210.651 is a prerequisite for this course.

Corequisite(s): NR.210.653[C]

NR.210.653. Clinical Practicum I-Clinical Nurse Specialist: Advanced Practice Management. 3 Credits.

This is the first of four sequential clinical practicum courses that provide the clinical nurse specialist (CNS) student with opportunities to develop knowledge and skills in the diverse roles and skills of a CNS. Based on the student's past experience, this practicum is individualized and focuses on the roles and essential skills of the CNS within a population focus. Students are expected to integrate knowledge of disease, evidence based practice, advanced care coordination, and principles of patient/ staff education as components of advanced nursing practice in the care of patients and families across the continuum of health care. Students begin to integrate and apply their understanding across the three spheres of influence with emphasis on the patient sphere. Under the guidance of a clinical instructor and experienced preceptor, the clinical nurse specialist (CNS) student will participate in 168 practicum hours within their population focus. Prerequisite: NR.210.650

Prerequisite(s): NR.210.650 is a prerequisite for this course.

NR.210.654. Clinical Practicum II-Clinical Nurse Specialist: Advanced Practice Management. 4 Credits.

This is the second of four sequential clinical practicum courses that provide the clinical nurse specialist (CNS) student with opportunities to increase knowledge and skills in the diverse roles and skills of a CNS. This course builds on previous CNS coursework. This practicum is individualized and focuses on application of the roles and essential skills of the CNS within a population focus. Students are expected to integrate knowledge of disease, evidence based practice, advanced care coordination, and principles of patient/staff education as components of advanced nursing practice in the care of patients and families across the continuum of health care. Students integrate and apply their understanding across the three spheres of influence with emphasis on the patient and nurse and nursing practice spheres. Under the guidance of a clinical instructor and experienced preceptor, the clinical nurse specialist (CNS) student will participate in 224 practicum hours within their population focus. Prerequisite: NR.210.653Pre or corequisite: NR.210.651

Prerequisite(s): NR.210.653 is a prerequisite for this course. **Corequisite(s):** NR.210.651[C]

NR.210.655. Clinical Practicum III-Clinical Nurse Specialist: Advanced Practice Management. 3 Credits.

This is the third of four sequential clinical practicum courses that prepare the clinical nurse specialist (CNS) student with opportunities to increase knowledge and skills in the diverse roles and skills of a CNS. This course builds on previous CNS coursework. This practicum is individualized and focuses on organizational and systems leadership in application of the roles and essential skills of the CNS within a population focus. Students are expected to integrate knowledge of disease, evidence based practice, advanced care coordination, and principles of patient/staff education as components of advanced nursing practice in the care of patients and families across the continuum of health care. Students integrate and apply their understanding across the three spheres of influence: Patient, nurse/nursing practice, and organization/system spheres. Under the guidance of a clinical instructor and experienced preceptor, the clinical nurse specialist (CNS) student will participate in 168 practicum hours within their population focus. Prerequisite: NR.210.654Coreguisite: NR.210.652

Prerequisite(s): NR.210.654 is a prerequisite for this course.

NR.210.656. Clinical Practicum IV-Clinical Nurse Specialist: Advanced Practice Management. 3 - 4 Credits.

This is the fourth of four sequential clinical practicum courses that prepare the clinical nurse specialist (CNS) student with opportunities to increase knowledge and skills in the diverse roles and skills of a CNS. This course builds on previous CNS coursework. This practicum is individualized and focuses on evaluation of clinical practice in application of the roles and essential skills of the CNS within a population focus. Students are expected to integrate knowledge of disease, evidence based practice, advanced care coordination, and principles of patient/ staff education as components of advanced nursing practice in the care of patients and families with complex needs across the continuum of health care. Students integrate and apply their understanding across the three spheres of influence: Patient, nurse/nursing practice, and organization/system spheres. Under the guidance of a clinical instructor and experienced preceptor, the clinical nurse specialist (CNS) student will participate in 168 practicum hours within their population focus.Prerequisites: NR.210.652 and 210.655

Prerequisite(s): NR.210.652 and 210.655 are prerequisites for this course.; NR.210.655[C] AND NR.210.652[C]

NR.210.660. Introduction to Acute Care. 4 Credits.

This course provides foundational content for Adult-Gerontological Acute Care Nurse Practitioner (AG-ACNP) students to critically think about symptoms, differential diagnoses, evidence-based diagnostic evaluation and management of common acute and chronic illness disease processes based on age, gender, sexuality, culture, ethnicity, psychosocial issues, and integrates ethical principles in decision making. Content focuses on the AG-ACNP role, scope of practice and principles of diagnostic and advanced technologies to provide selected interventions in the care of acutely and critically ill adults across the lifespan. Unique characteristics and risks associated with hospitalized patients are also addressed. Concentrated clinical instruction will allow the AG-ACNP student to develop advanced assessment strategies while enhancing history taking and physical assessment skills. 56 clinical hours.Prerequisites: NR.210.600, 210.601, 210.602, 210.605 Prerequisite(s): NR.210.600, 210.601, and 210.602 are prerequisites for this course.

NR.210.661. Advanced Practice in Acute Care I. 6 Credits.

This is the first of four specialty courses that introduces clinical skills combined with evidence-based practice emphasizing the integration of theory, comprehensive assessment and advanced technologies for acutely ill adults across the lifespan in acute and critical care settings. Content focuses on the pathophysiology, subjective and objective clinical data, differential diagnoses and the development of a management plan considering age, gender, sexuality and social determinants of health within the scope of Adult-Gerontological Acute Care Nurse Practitioner (AG-ACNP) practice. Supervised clinical instruction in acute and critical care settings allows the AG-ACNP student to perform comprehensive assessment skills, diagnosis and management including incorporating relevant diagnostic and therapeutic testing modalities. 168 clinical hours. Prerequisite: NR.210.660

Prerequisite(s): NR.210.660 is a prerequisite for this course.

NR.210.662. Advanced Practice in Acute Care II. 4 Credits.

This is the second of four specialty courses that fosters advanced clinical skills while incorporating evidence-based practice emphasizing the integration of theory, comprehensive assessment and advanced technologies for acutely ill adults across the lifespan in acute and critical care settings. Content focuses on pathophysiology, subjective and objective clinical data, differential diagnoses and the development of a management plan considering age, gender, sexuality and social determinants of health within the scope of Adult-Gerontological Acute Care Nurse Practitioner (AG-ACNP) practice. Supervised clinical instruction in acute and critical care settings allows the AG-ACNP student to improve comprehensive clinical assessment skills including tailoring diagnostic and therapeutic testing modalities. 168 clinical hours. Prerequisite: NR.210.661

Prerequisite(s): NR.210.661 is a prerequisite for this course.

NR.210.663. Advanced Practice in Acute Care III. 4 Credits.

This is the third of four specialty courses that prepares students to assess, diagnose and manage acutely ill adults across the lifespan while emphasizing high acuity of disease entities encountered in acute and critical care settings. Content focuses on incorporating evidence-based practice while utilizing pathophysiology, subjective and objective clinical data, differential diagnoses and the development of a management plan considering age, gender, sexuality and social determinants of health within the scope of Adult-Gerontological Acute Care Nurse Practitioner (AG-ACNP) practice. Supervised clinical instruction in acute and critical care settings allows the AG-ACNP student to enhance comprehensive clinical assessment skills including modifying diagnostic and therapeutic testing modalities. 168 clinical hours. Prerequisite: NR.210.662

Prerequisite(s): NR.210.662 is a prerequisite for this course.

NR.210.664. Advanced Practice in Acute Care IV. 6 Credits.

This is the fourth of four specialized courses that prepares students to assess, diagnose and manage acutely ill adults across the lifespan while emphasizing the highest acuity of disease entities encountered in acute and critical care settings. Content focuses on incorporating evidence-based practice while utilizing pathophysiology, subjective and objective clinical data, differential diagnoses and the development of a management plan considering age, gender, sexuality and social determinants of health within the scope of Adult-Gerontological Acute Care Nurse Practitioner (AG-ACNP) practice. Supervised clinical instruction in acute and critical care settings allows the AG-ACNP student to enrich comprehensive clinical assessment skills including individualizing diagnostic and therapeutic testing modalities. Additionally, palliative care clinical experiences will be provided. 224 clinical hours. Prerequisite: NR.210.663

Prerequisite(s): NR.210.663 is a prerequisite for this course.

NR.210.670. Human Anatomy. 4 Credits.

This four week course offered by the Center for Functional and Evolutionary Anatomy within the JHU School of Medicine meets for 4 hours each day, 5 days a week. It is designed to give undergraduate and graduate students an introduction to all aspects of human anatomy, and includes demonstrations using human cadavers. A regional approach will be employed, beginning with the thorax and abdomen, continuing with the limbs, and ending with the head and neck. Lectures on each topic will be given in the morning, followed by prosection demonstrations (i.e., dissections prepared by departmental staff and presented to students) on human cadavers in the afternoon. Course materials will also involve hands-on work with human bones, various imaging modalities (e.g., radiographs, CT scans), and computer programs. Opportunities are also available for students to observe surgical procedures at the Johns Hopkins Hospital. Student performance will be evaluated by both written and practical (cadaver-based) exams. https://esgweb1.nts.jhu.edu/fae/ anatomyinstitute/

NR.210.671. Advanced Pharmacology for Nurse Anesthesiology. 3 Credits.

This course is designed to provide an in-depth foundation of advanced pharmacology principles and their application to anesthesia across the lifespan, including special populations. The course provides detailed explorations of the uptake, distribution, biotransformation, and elimination of currently used clinical anesthesia pharmacotherapeutics. Pharmacogenetic disorders with specific anesthesia implications are examined. Various agents affecting the autonomic nervous system are detailed. Chemotherapeutic agents and anesthetic considerations will be covered. Prerequisite: NR.210.602

Prerequisite(s): NR.210.602[C] AND NR.210.686[C]

Corequisite(s): NR.210.672[C]

NR.210.672. Advanced Pathophysiology for Nurse Anesthesiology. 4 Credits.

This course will cover pathophysiology relevant to anesthesia practice and will build upon the advanced physiology course. The focus will be on the relationship to anesthesia assessment, planning, decision-making and management. Evidence-based practice resulting from relevant research will be incorporated to develop a relationship between patient pathophysiology and anesthesia assessment, planning, decision-making, and management. Students will utilize this information to build a foundation for anesthesia clinical reasoning. Prerequisite: NR.210.686

Prerequisite(s): NR.210.686[C] Corequisite(s): NR.210.671[C]

NR.210.673. Introduction to Anesthesia Equipment, Technology, and Clinical Practice. 2 Credits.

This course introduces students to equipment and technology used in anesthesia practice with an emphasis on patient safety. This course also focuses on student simulation experiences and class discussions in conjunction with in-hospital observational experiences. Prerequisites: NR.210.671, 210.672, and NR.210.674Corequisites: 210.675

Prerequisite(s): NR.210.671[C] AND NR.210.672[C]

Corequisite(s): NR.210.675[C]

NR.210.674. Professional Aspects of Nurse Anesthesiology Practice. 3 Credits.

This course examines the professional role development of the nurse anesthesiologist. Course content focuses on: history of nurse anesthesiology; scope and standards of nurse anesthesiology practice; professional ethics; regulation of practice (governmental and nongovernmental); the healthcare delivery system; legal aspects of anesthesia practice; business of anesthesia (including practice management and anesthesia reimbursement, payment policies, CRNA practice patterns); wellness and substance use disorder; structure and function of state, national, and international anesthesia organizations; professional advocacy and issues in CRNA practice; assessing quality in anesthesia practice; cultural competence; healthcare informatics; and interprofessional collaboration to improve health care. This course provides students with a comprehensive description of the nurse anesthesiology profession. Prerequisites: NR.210.671 and 210.672

NR.210.675. Nurse Anesthesiology Principles I. 2 Credits.

The focus of this course is the development of foundational knowledge to deliver safe, effective anesthesia care across the lifespan. Emphasis will be placed on preanesthesia assessment, evaluation and preparation (patient and anesthetizing area); utilization and interpretation of data (labs and diagnostic exams); formulation and evaluation of anesthesia plans; communication and documentation; fluid assessment and management; patient positioning; anesthesia techniques and complications; and pain theory/ pain management (acute, chronic); postanesthesia care/respiratory therapy. Relevant literature related to evidence-based best practices will be reviewed. Simulation will be incorporated in the course. Prerequisites: NR.210.671 and 210.672Corequisites: NR.210.673 and 210.674

Prerequisite(s): NR.210.671[C] AND NR.210.672[C]

Corequisite(s): NR.210.673[C]

NR.210.676. Nurse Anesthesiology Principles II. 3 Credits.

This course is the second of four anesthesia principles courses and builds on knowledge gained from the first anesthesia principles course. This course provides students with the foundation to provide safe, evidence-based anesthesia to patients undergoing common procedures, to patients undergoing local/regional anesthesia, and to special populations. Anesthetic management and considerations of patients having various surgeries will be discussed. Prerequisites: NR.210.673, 210.674 and 210.675Corequisite: NR.210.679

Prerequisite(s): NR.210.675[C] AND NR.210.673[C]

Corequisite(s): NR.210.679[C]

NR.210.677. Nurse Anesthesiology Principles III. 2 Credits.

This is the third of four anesthesia principles courses and builds on knowledge gained from the previous anesthesia principles courses. Anesthesia considerations of special populations of patients and/or anesthesia for specialty surgical cases will be discussed to include anatomy, physiology, pathophysiology, pharmacology, anesthetic techniques, and management of complications. Relevant literature related to evidence-based best practices will be reviewed. This course provides students with the foundation to provide safe, evidence-based anesthesia to special populations. Simulation will be incorporated in the course.Prerequisites: NR.210.676 and 210.679Corequisite: NR.210.680

Prerequisite(s): NR.210.676[C] AND NR.210.687[C]

Corequisite(s): NR.210.680[C]

NR.210.678. Nurse Anesthesiology Principles IV. 2 Credits.

This course is the last nurse anesthesiology principles course and builds upon knowledge gained in the first three principles courses. Course content encompasses anesthesia for specialty surgical procedures. Relevant literature related to evidence-based best practices will be reviewed. This course provides students with the foundation to provide safe evidence-based anesthesia for patients undergoing specialty procedures. Simulation will be incorporated in the course.Prerequisites: NR.210.677 and 210.680Corequisite: NR.210.681

Prerequisite(s): NR.210.677[C] AND NR.210.680[C]

Corequisite(s): NR.210.681[C]

NR.210.679. Clinical Residency I. 3 Credits.

This is the first of seven (7) clinical residency courses. Applications of perianesthesia concepts are integrated throughout the clinical experience. An emphasis on patient safety and vigilance, anesthesia topics of pre-operative evaluation, comprehensive equipment check and prevention of iatrogenic complications for general anesthesia are explored. Experiential learning reflects upon the construction of care plans and application of skills and knowledge taught in didactic portion of the curriculumPrerequisites: NR.210.673, 210.674, and 210.675Corequisite: NR.210.676

Prerequisite(s): NR.210.675[C] AND NR.210.673[C]

Corequisite(s): NR.210.676[C]

NR.210.680. Clinical Residency III. 3 Credits.

This is the third in a series of seven (7) courses. This course builds upon the clinical knowledge and foundational concepts developed in Clinical Residency I and in-hospital experiences. Applications of clinical concepts specific to, regional anesthesia and pain management are explored through patient care and simulation as needed. Students begin to incorporate evidence-based research practices and an emphasis is placed on patient safety and vigilance, culturally competent care of the patient throughout the peri-anesthesia continuum, interpersonal communication and integration of critical and reflective thinking of an anesthesia provider. DNP practicum hours will be incorporated into this course for the development of the DNP project.Prerequisites: NR.210.680A Corequisite: NR.210.677

Prerequisite(s): NR.210.687[C] Corequisite(s): NR.210.677[C]

NR.210.681. Clinical Residency IV. 4 Credits.

This course builds upon the clinical knowledge and foundational concepts developed in Clinical Residencies I, II and III. Applications of clinical concepts specific to cardiovascular and thoracic anesthesia, neurosurgical anesthesia and more advanced anesthesia specialty cases are fundamentally explored through simulation and hands on workshops Students begin to incorporate evidence based research practices and an emphasis is placed on patient safety and vigilance, culturally competent care of the patient throughout the peri-anesthesia continuum, interpersonal communication and integration of critical and reflective thinking of an anesthesia provider. DNP practicum hours will be incorporated into this course for the implementation of the DNP project.Prerequisites: NR.210.677 and 210.680Corequisite: NR.210.678

Prerequisite(s): NR.210.677[C] AND NR.210.680[C]

Corequisite(s): NR.210.678[C]

NR.210.682. Clinical Residency V. 4 Credits.

Students use critical thinking skills and best practices in the synthesis and correlation of didactic information to the clinical practice of nurse anesthesia. Students develop, implement, and evaluate anesthesia care plans for all patient populations based on best evidence. Clinical experiences focus on anesthesia care of high acuity patients across the lifespan undergoing elective and emergency surgical and diagnostic procedures. Emphasis on advanced health assessment and differential diagnosis, specialty surgical procedures, insertion of invasive pressure monitoring catheters, advanced airway management and safety and vigilance. Students provide culturally competent care of the patient throughout the perianesthesia continuum. DNP practicum hours will be incorporated into this course for the evaluation of the DNP project. Prerequisites: NR.210.678 and 210.681Corequisite: NR.210.684

Prerequisite(s): NR.210.678[C] AND NR.210.681[C]

Corequisite(s): NR.210.684[C]

NR.210.683. Clinical Residency VII. 3 Credits.

Students develop, implement, and evaluate comprehensive anesthesia care plans for all patient populations based on best evidence. Clinical experiences focus on anesthesia care of special patient populations undergoing a wide variety of diagnostic, surgical, and therapeutic procedures. Students demonstrate skills of ultrasound techniques for peripheral nerve blocks and invasive line insertion with minimal supervision. Student teaching and mentorship opportunities are integrated in the simulation lab. In addition, this course provides the third-year student with opportunities to further explore the role of the DNP through the synthesis and application of advanced principles regarding patient safety, risk reduction, healthcare law, healthcare policy, and bioethics for anesthesia practice. Prerequisites: NR.210.683A

Prerequisite(s): NR.210.688[C] Corequisite(s): NR.210.685[C]

NR.210.684. Seminars in Nurse Anesthesiology I. 3 Credits.

This is the first in a series of two (2) clinical correlation courses. Selected topics and case studies will be applied in an advanced study of scientific principles, principles of therapeutics, and principles of anesthesia practice in order to further develop critical thinking skills and to foster continued integration of theoretical knowledge into clinical practice. This course includes student participation in discussion of clinical experiences, case presentations, and current evidencebased practice articles from anesthesia related literature. Students will critically analyze, synthesize and evaluate the knowledge gained in all previous nurse anesthesia courses and clinical residencies. This course reviews comprehensive topics encountered on the National Certification Examination (NCE). Data management will also be included in this course and will provide students with the knowledge and skills necessary to develop and execute the evaluation plan for the scholarly project. The comprehensive exam (NBCRNA Self Evaluation Exam) will be taken during this course. Prerequisites: NR.210.678 and 210.681 Coreguisite: NR.210.682

Prerequisite(s): NR.210.678[C] AND NR.210.681[C]

Corequisite(s): NR.210.682[C]

NR.210.685. Seminars in Nurse Anesthesiology II. 3 Credits.

This is the second in a series of two (2) clinical correlation courses. Selected topics and case studies will be utilized in an advanced study of scientific principles, principles of therapeutics, and principles of anesthesia practice in order to further develop critical thinking skills and to foster continued integration of theoretical knowledge into clinical practice. This course also includes student participation in discussion of clinical experiences, case presentations, and current evidence-based practice articles from anesthesia related literature. Students will critically analyze, synthesize and evaluate the knowledge gained in all previous nurse anesthesia courses and clinical residencies. This course reviews comprehensive topics encountered on the National Certification Examination (NCE).Prerequisites: NR.210.682 and 210.684Corequisite: NR.210.683

Prerequisite(s): NR.210.684[C] AND NR.210.688[C]

Corequisite(s): NR.210.683[C]

NR.210.686. Advanced Physiology for Nurse Anesthesiology. 4 Credits.

This course will cover an in-depth focus on human physiology which is essential for the practice of nurse anesthesiology. Topics are covered from a molecular, cellular, tissue, organ, and system perspective. Also covered in this course are physiologic differences related to culture, gender, race, age, and genetics. The content of this course will serve as the foundation for advanced clinical assessment, advanced pathophysiology, clinical decision-making, and management.

Prerequisite(s): NR.210.601[C]

NR.210.687. Clinical Residency II. 1 Credit.

This is the second in a series of seven (7) courses. This course builds upon the clinical knowledge and foundational concepts developed in Clinical Residency I and in-hospital experiences. Applications of clinical concepts specific to obstetrical anesthesia, regional anesthesia and pain management are explored through simulation and patient care. Students begin to incorporate evidence-based research practices and an emphasis is placed on patient safety and vigilance, culturally competent care of the patient throughout the peri-anesthesia continuum, interpersonal communication and integration of critical and reflective thinking of an anesthesia provider.

Prerequisite(s): NR.210.676[C] AND NR.210.679[C]

NR.210.688. Clinical Residency VI. 1 Credit.

Students develop, implement, and evaluate comprehensive anesthesia care plans for all patient populations based on best evidence. Clinical experiences focus on anesthesia care of special patient populations undergoing a wide variety of diagnostic, surgical, and therapeutic procedures. Students demonstrate skills of ultrasound techniques for peripheral nerve blocks and invasive line insertion with minimal supervision. Student teaching and mentorship opportunities are integrated in the simulation lab. In addition, this course provides the third-year student with opportunities to further explore the role of the DNP through the synthesis and application of advanced principles regarding patient safety, risk reduction, healthcare law, healthcare policy, and bioethics for anesthesia practicePrerequisites: NR 210.684 and NR 210.682

Prerequisite(s): NR.210.684[C] AND NR.210.682[C]

NR.210.802. Advanced Nursing Health Policy. 2 Credits.

This course develops the knowledge and skills for nurse leaders to engage with and develop policies that shape health at all levels - from local to global. The course examines policies that structure the US healthcare system, and produce population health outcomes and health inequities, and explores leading approaches for improving these systems, outcomes, and inequities through policy change. The course offers a diverse set of opportunities for nurses to engage in the policy process, analyze policies and advocate for policies that align with the ethical aims of the profession to improve health and health equity. The course also addresses the interconnection of local and global health, and key threats to our collective planetary health, and identifies opportunities for policies to address these threats. The course is grounded in attention to fundamental causes such as structural racism and the social determinants of health, and the principles of human rights and diversity, equity, inclusion and justice. Throughout, the course highlights the importance of and opportunities for nursing leadership in the policy process and in advocacy. Prerequisites: NR.210.607

Prerequisite(s): NR.210.607[C]

NR.210.803. Nursing Inquiry for Evidence-Based Practice. 3 Credits.

This course utilizes the Johns Hopkins Evidenced-Based Practice Model to guide nursing inquiry. The conceptualization, definition, theoretical rationale and methods of evidenced-based practice will be evaluated, and related research will be described. Production of the integrative review and exploration of systematic reviews are hallmarks of this course. Prerequisites: NR.210.606 and 210.896

Prerequisite(s): NR.210.606[C] AND NR.210.886[C]

NR.210.804. Organizational and Systems Leadership for Quality Care. 2 Credits.

This course facilitates leading, advocating, and managing the application of innovative responses to organizational challenges. Emphasis is placed on development and evaluation of care delivery approaches that meet the needs of targeted patient populations by enhancing accountability for effective and efficient health care, quality improvement, and patient safety. This course focuses on development of strategies to implement change initiatives, manage conflict, and manage the ethical dilemmas inherent in health care organizations.

NR.210.805. Translating Evidence into Practice. 3 Credits.

This course focuses on the integration and application of knowledge into practice. The theories and strategies used to facilitate translation of evidence into practice are considered and analyzed. Theories of change, caring, human needs and value systems are considered with respect to the translation of evidence into practice. A variety of translation strategies, including instructional design, pathways, protocols and programs are discussed. Enablers of translation are considered along with methods of analysis and evaluation. Prerequisites: NR.210.803 and 210.896Corequisite: NR.210.897

NR.210.806. Health Finance. 2 Credits.

This course introduces students to the business and financial aspects of healthcare. Basic financial concepts and misconceptions about cost behavior, pricing and revenue, and cash flow are explored. Concepts are organized around the financial management paradigm: performance planning, performance measurement and performance management. Students will learn how to prepare several types of budgets, how to use performance reports and dashboards to guide performance, and how to prepare a variety of formal and ad hoc financial analyses. The course concludes with discussions related to improving financial performance, developing improvement plans, and making the "pitch" to decision makers.

NR.210.817. Analysis and Evaluation of Individual and Population Health Data. 3 Credits.

Clinical data management is an essential component of evaluating any Evidence Based Practice/Performance Improvement project. A high caliber data management plan and its implementation will provide key stakeholders and decision-makers with the information necessary to make decisions about the value and continuation of each evidencebased intervention. Components of data management include clearly identified outcomes linked to variables and data sources; appropriate data collected for the purpose of measuring these outcomes; adequate statistical power to determine success of the project; proper data cleaning and manipulation techniques; appropriate statistical methods for measuring the outcomes; and a meaningful presentation of outcomes that addresses the concerns and questions of key stakeholders. The clinical data management course will provide students with the knowledge and skills necessary to develop and execute the data management plan for the scholarly project. Prerequisites: NR.210.606, 210.803, 210.897

Prerequisite(s): NR.210.887[C] AND NR.210.803[C] AND NR.210.606[C]

NR.210.818. Clinical Data Management and Analyses. 2 Credits.

Clinical data management is essential for the evaluation of any evidence-based practice performance improvement project. A high caliber evaluation plan and its implementation will provide key stakeholders and decision-makers with the information to make decisions about the value and continuance of each evidence-based intervention. Components of an evaluation plan include clearly identified outcomes linked to measures, variables, and data sources; appropriate data collected for the purpose of measuring these outcomes; adequate statistical power to determine success of the project; proper data cleaning and manipulation techniques; appropriate statistical methods for determining the outcomes; and a meaningful presentation of outcomes that addresses the concerns and questions of key stakeholders. this course provides students with the knowledge and skills necessary to develop and execute the evaluation plan for the scholarly project. Prerequisite: NR.210.817. Corequisite: NR.210.899Corequisite: NR.210.899

Corequisite(s): NR.210.889[C]

NR.210.821. Digital Technologies, Artificial Intelligence, and Machine Learning in the Era of Big Data. 2 Credits.

This course will explore the role of digital technologies in healthcare and the social, economic, and ethical implications of these technologies in policy, practice, education, and research. Students will learn how advances in data collection and innovations in analytic methods are advancing progress in health care and research. They will also consider that not all individuals and communities may benefit equally from digital advances and existing health care disparities may be perpetuated. Through this course students will explore some of the positive and negative issues surrounding disruptive technologies in health care and have an opportunity to apply their knowledge to real world situations. Prerequisite(s): NR.210.803[C] AND NR.110.809[C] AND NR.110.815[C]

NR.210.822. Health Information Systems and Patient Care Technologies. 2 Credits.

This course focuses on the evaluation and use of information technology in healthcare at the level of the advanced practice nurse (APN).

NR.210.823. Special Topics: Qualitative Design and Implementation. 1 - 3 Credits.

This course will provide an overview of how qualitative methods can be applied to health-related projects or research. Focus will be on understanding common qualitative approaches used to plan or evaluate programs or research including strategies for collecting, managing and analyzing qualitative data. Prerequisites: NR.210.803 or NR.110.809 Prerequisite(s): NR.110.815[C]

NR.210.824. Transitions to Practice. 2 - 3 Credits.

The course lays a foundation to prepare learners to transition from the student to practicing provider role through interactive learning, primary care immersion and specialty care rotations. The aim is to promote independence in the role of primary care nurse practitioner in prevention, screening, illness, and care coordination for patients across the lifespan. It integrates biomedical, psychological, social and nursing aspects of care based on age, gender, culture, and ethnicity. This course is required for all Supporting Nursing Advanced Practice Transitions (SNAPT) Fellowship participants and is an elective for students not in the Fellowship.

NR.210.886. Problem Discovery. 1 - 3 Credits.

This is the first in the series of courses culminating in the DNP Scholarly Project. The purpose of this course is two-fold: first, to introduce the student to the essentials of scholarly writing and the logical presentation of ideas; and second, to then apply these essential skills to the identification of an important practice problem. The student identifies an important practice problem, defines the scope and significance of the problem. For DNP/AP and DNP Executive students in practicum, this course also provides the integrative practice experience necessary for scholarship in translational innovation and improvement for advanced nursing practice and health outcomes. The practicum experience complements the foundational advanced nursing practice experience to identify, develop, implement, evaluate and disseminate the DNP Scholarly Project. Credit hour requirements vary based on the student and degree plan.

NR.210.887. Project Advancement. 1 - 3 Credits.

This is the second of four scholarly project courses. This course focuses on the development of the comprehensive plan for the DNP Scholarly Project. The student develops the plan to ensure translation of the evidence in addressing a significant clinical problem. The student develops the full application for submission to the Institutional Review Board/Ethics Committee. For DNP/AP and DNP Executive students in practicum, this course also provides the integrative practice experience necessary for scholarship in translational innovation and improvement for advanced nursing practice and health outcomes. The practicum experience complements the foundational advanced nursing practice experience to identify, develop, implement, evaluate and disseminate the DNP Scholarly Project. Credit hour requirements vary based on the student and degree plan.

Prerequisite(s): NR.210.803[C] AND NR.210.886[C]

NR.210.888. Project Application. 1 - 3 Credits.

This scholarly project course is the third in the series of four courses. In this course the student implements the approved project plan. This course fosters the student's development of requisite skills for project implementation, such as managing time and resources, assessing and managing implementation issues, and utilizing communication and collaboration strategies. For DNP/AP and DNP Executive students in practicum, this course also provides the integrative practice experience necessary for scholarship in translational innovation and improvement for advanced nursing practice and health outcomes. The practicum experience complements the foundational advanced nursing practice experience to identify, develop, implement, evaluate and disseminate the DNP Scholarly Project. Credit hour requirements vary based on the student and degree plan. Prerequisites: NR.210.805, NR.210.817, and NR.210.887.

NR.210.889. Project Evaluation and Dissemination. 1 - 3 Credits.

This is the final component of the scholarly project sequence. Content, as in the other project experiences, reflects the interest of the student and is designed to meet individual student needs and career goals. This final course allows the student, with guidance from mentor and faculty, to complete the clinical project and finalize the scholarly written and oral reports that disseminate and integrate new knowledge. The final products will reflect the student's ability to employ effective communication and collaboration skills, take a leadership role, influence health care quality and safety, transform practice, lead clinical innovation, and successfully negotiate change in health care delivery for individuals, families, populations, or systems across a broad spectrum of healthcare. This course also provides the integrative practice experience necessary for scholarship in translational innovation and improvement for advanced nursing practice and health outcomes. The practicum experience complements the foundational advanced nursing practice I experience to identify, develop, implement, evaluate and disseminate the DNP Scholarly

Prerequisite(s): NR.210.888[C] Corequisite(s): NR.210.818[C]

NR.210.894. DNP Practicum. 1 - 2 Credits.

This course provides the integrative practice experience necessary for scholarship in translational innovation and improvement for advanced nursing practice and health outcomes. The practicum experience complements the foundational advanced practice clinical experience to identify, develop, implement, evaluate and disseminate the DNP Scholarly Project. This course is taken concurrently with the DNP Scholarly Project didactic courses. Credit hour requirements vary based on the student specialty track and degree plan.Corequisites: 210.896, 210.897, 210.898, 210.899

NR.210.895. Independent Study. 1 - 3 Credits.

Scholarly activity under guidance of faculty serves to help students achieve professional goals. This course may be taken as elective credit.

NR.210.896. Problem Identification. 1 Credit.

This is the first in the series of courses culminating in the DNP Scholarly Project. The purpose of this course is two-fold: first, to introduce the student to the essentials of scholarly writing and the logical presentation of ideas; and second, to then apply these essential skills to the identification of an important practice problem. The student identifies an important practice problem, defines the scope and significance of the problem. Prerequisite: NR.210.608 Corequisite: NR.210.894

NR.210.897. Project Development. 1 Credit.

The second scholarly project experience will provide students with the support and direction needed in collaboration with the sponsoring facility and mentor to develop a comprehensive, site specific project, evaluation plan, and IRB proposal. Prerequisites: NR.210.803 and 210.896Corequisite: NR.210.805 and 210.894

NR.210.898. Project Implementation. 1 Credit.

This scholarly project course is the third in the series of four courses. In this course the student implements the approved project plan. This course fosters the student's development of requisite skills for project implementation, such as managing time and resources, assessing and managing implementation issues, and utilizing communication and collaboration strategies.Prerequisites: NR.210.817 and 210.897; Documented IRB approvalCorequisite: NR.210.894

NR.210.899. Project Evaluation. 1 Credit.

This is the final component of the scholarly project sequence. Content, as in the other project experiences, reflects the interest of the student and is designed to meet individual student needs and career goals. This final course allows the student, with guidance from mentor and faculty, to complete the clinical project and finalize the scholarly written and oral reports that disseminate and integrate new knowledge. The final products will reflect the student's ability to employ effective communication and collaboration skills, take a leadership role, influence health care quality and safety, transform practice, lead clinical innovation, and successfully negotiate change in health care delivery for individuals, families, populations, or systems across a broad spectrum of healthcare. Prerequisites: NR.210.898Corequisites: NR.210.818 and 210.894

NR.500

NR.500.601. Public Health Nursing Theory & Practice. 3 Credits.

Analysis of theories relevant to nursing and public health will assist the student in the identification of the unique role of public health nursing across settings. Students will explore the role and function of public health nursing in primary and secondary prevention in the community, state and nation. Special emphasis will be placed on assessing the community as client and developing models of community-based health promotion and prevention.

NR.500.602. Public Health Nursing Theory & Practice - Practicum. 3 Credits.

Students enrolled in this course conduct a community assessment and write a proposal to address or prevent a risk factor or health problem in that population/community. The practicum is conducted in a community agency or established program. 168 hours clinical.Prerequisites: NR.500.601, 500.604, PH.340.601, PH.140.611 & 612 OR PH.140.621, 622 & 623

NR.500.606. Public Health Nursing Leadership, Management, & Evaluation Capstone Practicum. 3 Credits.

The course content addresses the application of principles and theories of leadership, management, and evaluation in a public health nursing setting. The educational focus will be mentored, but student-directed, leadership and evaluation skills development. Each student will be expected to complete an internship with a public health-related agency. During this placement, the student will conduct a program evaluation and analyze the use of management and leadership skills within the agency. The student's leadership skill development will be enhanced by working collaboratively with leaders in their host agency. Early in the semester, each student will identify her/his specific learning and skills development objectives. Faculty will guide students through the process of meeting these. Weekly seminars complement the field experience. 168 hours clinical.Prerequisites: NR 110.560 and 500.602, 604, 605, PH.340.601, PH.140.611 & 612 OR PH.140.621, 622, & 623

NR.500.607. Public Health Nursing/NP Capstone Practicum. 1 Credit.

This course will provide MSN-NP/MPH students with the opportunity to integrate their knowledge of public health problems and population-based assessment, prevention and intervention, with direct care and evaluation of clinical outcomes. Applying this knowledge to the evaluation of public health policy will be an integrating theme of the course. This course will fulfill the SPH Capstone and Integrating Experience requirement. 56 hours clinical.Prerequisites: NR.500.601, 500.602, 500.605, PH.340.601, PH.140.611 and 140.612 OR PH 140.621-140.623Corequisite: NR.110.560